

Implementation Guide for functional standards prepared by CEN/TC 234 “Gas supply”

ICS 01.110; 91.140.40

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

National foreword

This Published Document reproduces verbatim CR 13737:2000.

The UK participation in its preparation was entrusted to Technical Committee GSE/33, Gas supply, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the CR title page, pages 2 to 46, an inside back cover and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

This Published Document, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 June 2000

© BSI 06-2000

ISBN 0 580 34894 6

Amendments issued since publication

Amd. No.	Date	Comments

January 2000

ICS

English version

Implementation Guide for functional standards prepared by
CEN/TC 234 "Gas supply"

This CEN Report was approved by CEN on 8 September 1999. It has been drawn up by the Technical Committee CEN/TC 234.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Foreword

This CEN Report (CR) is meant as a guideline for the national implementation of the functional European Standards elaborated by the Technical Committee CEN/TC 234, in particular EN 1775.

It has been prepared by the Technical Committee CEN/TC 234 on the basis of resolution BT 53/1998 (Annex A).

The details of the implementation of the other standards of CEN/TC 234 besides EN 1775 will be included in future revisions of this CEN Report, when the needed information is available.

In its functional standards CEN/TC 234 establishes common safety principles to design, construct, operate and maintain safe and reliable gas supply systems. The detail to comply with these principles is left to existing national standards in support of national legislation of technical rules. In the event of conflicts in terms of more restrictive requirements in the national legislation/regulation with the requirements of CEN/TC 234 standards the national legislation/regulation shall take precedence as illustrated in this CEN Report.

Functional standards at CEN are a relatively novel concept. So already during the elaboration of the standards a way had to be found to deal with in compliance with the CEN internal regulations. For this purpose CEN/TC 234 prepared its "*Position Paper - Acceptance of CEN/TC 234 Standards*" N 432 (see Annex B) which was endorsed by CEN/BT Resolution C14/1997 (see Annex C).

This CEN Report contains for each country affected a national page where the relevant national legislation/regulations for the field of gas supply are listed. The national page may further contain the relevant national standards and/or codes of practice and national bodies which can act as further sources of information, if an interested party needs further guidance.

The national page may, if necessary, specifically hint at requirements in the national legislation/regulations that are more stringent than those in the European Standards prepared by CEN/TC 234, in particular EN 1775. This shall be done, however, without giving any details.

The listing of the national legislation/regulation is established by each CEN member. The responsibility for content and updating of the national page is assumed by the individual CEN members.

Contents

Foreword	2
1 Page for Austria	4
2 Page for Belgium	5
3 Page for the Czech Republic	7
4 Page for Denmark	8
5 Page for Finland	9
6 Page for France	10
7 Page for Germany	13
8 Page for Greek	16
9 Page for Ireland	17
10 Page for Italy	19
11 Page for The Netherlands	21
12 Page for Sweden	23
13 Page for Switzerland	26
14 Page for the United Kingdom	27
Annex A Resolution BT 53/1998	28
Annex B Position Paper - Acceptance of CEN/TC 234 standards	29
Annex C Resolution BT C 14/1997	46

National pages of other European member countries will follow.

1 Page for Austria

1.1 Relevant Austrian legislation and standards for gas installations to which EN 1775 is applicable

1.1.1 Federal laws:

The relevant Austrian legislation is determined by constitution agenda of the federal states. Furthermore, a special gas law exists in each federal state.

1.1.2 ÖVGW regulations:

- G1 Technische Richtlinie für die Einrichtung, Änderung, Betrieb und Instandhaltung von Niederdruck-Gasanlagen (TR Gas) (aligned to EN 1775)
- G 4 Aufstellung von Gasgeräten über 50 kW
Installation of gas appliances greater 50 kW
- G 55 Gas-Hausanschlussleitungen mit einem Betriebsdruck bis einschließlich 4 bar
Gas connection mains for houses with an operating pressure up to and including 4 bar
- G 72 Absperrhähne in der Gasinstallation
Shutting-off valves in the gas installation

1.2 More restrictive requirements in Austrian legislation/ regulation

1.2.1 General

No detailed specifications needed.

1.2.2 Clauses to note regarding to EN 1775:1998

No detailed specifications needed.

1.3 Contact point

The national body which, for gas supply, is responsible for national standards and represents the national member of CEN (ON) is:

Österreichisches Normungsinstitut (ON)
Austrian Standards Institute (ON)
Heinestr. 38
Postfach 130
A-1021 Wien

TP: +431 213 00-412

Fax: +431 213 00-402

Internet. <http://www.on-norm.at>

2 Page for Belgium

2.1 Relevant Belgian legislation and standards for gas installations to which EN 1775 is applicable

2.1.1 Legislation

- Royal Decree of 28 June 1971 „Arrêté Royal déterminant les mesures de sécurité à prendre lors de l'établissement et dans l'exploitation des installations de distribution de gaz par canalisation“

2.1.2 National standards

- NBN D 51-003 „Installations for combustible piped gas, lighter than air“
- NBN D 51-004 „Installations for combustible piped gas, lighter than air - Special installation“
- NBN D-50-001 „Ventilating systems for housing“
- NBN D 51-001 „Premises for pressure reducing devices for natural gas“

2.2 More restrictive requirements in Belgian legislation/regulation

2.2.1 General

Belgium has chosen for the use of materials that withstand high temperatures (R_{HT} principle) - one of the possibilities stipulated in EN 1775 clause 4.2.

The authorised materials shall thus comply with requirements which are sometimes more stringent than those given in EN 1775.

2.2.2 Clauses to note regarding to EN 1775:1998

Clause of EN 1775:1998	Clause of the national legislation/regulation
3.4.3/3.4.4	NBN D 51-003, clause 3.5.1.2 Gas tightness achieved by metal to metal contact is required not only for threaded joints but also for the mechanical compression joints and the unions.
5.2	NBN D 51-003, clause 3.5.1.6 Mechanical compression joints shall comply with some specific requirements regarding the locking ring and the cap nut.
5.2.4.1	NBN D 51-003, clause 3.3.2 Compression joints may not be built-in in walls or floors.
5.5/5.6	NBN D 51-003, clause 6,7 Depending on the flow rate, the requirements about the ventilation and the electrical equipment in the space where the gasmeter(s) and the regulator(s) are installed, are stricter.
5.7.1	NBN D 51-003, clause 5.6 Flexible appliance connectors without permanently fixed end fitting are forbidden, except for low gas rate appliances without a gas tap in laboratories.

2.3 Contact point

Institut Belge de Normalisation
Avenue de la Brabançonne, 29
B-1000 Bruxelles

TP: +32 2 73 800 96

Fax: +32 2 733 42 64

3 Page for the Czech Republic

3.1 Relevant Czech legislation/regulation for gas installations

3.1.1 Czech legislation

- **Act. No. 174/1968**, on National Labour Inspection (in wording of Acts No. 575/1990, 159/1992, 396/1992-version with incorporated amendments, 47/1994)
- **Act No. 222/1994**, on Terms of Enterprising and Exercising the National Administration in the Energy Sector and on National Energy Inspection (amendments laws No. 83/1998)
- **Act No. 360/1992**, on Execution of the Authorised Architects, Engineers and Technicians and Technicians Engaged in Construction (in the wording of Act No. 164/1993 and 275/1994)
- **Decree No. 21/1979**, which defines the specially supervised gas equipment and specifies some requirements to ensuring their safety (amendment decree No. 554/1990)
- **Decree No. 48/1982**, which establishes the basic requirements to ensuring the labour safety and safety of the technical equipment (amendment decree No. 324/1990, 207/1991 Sb.)
- **Decree No. 85/1978**, on Inspection, Survey and Testing of the Gas Equipment
- **Decree No. 324/1990**, on Labour Safety and Safety of Technical Equipment at Construction Activities
- **Decree No. 196/1995**, which establishes in more detail the conditions for the gas supplies and method of calculation of damages inflicted by illegal gas take-off.
- **Decree No. 137/1998**, on General Requirements for Construction

3.1.2 Czech standards

- **CSN 73 0802** Fire protection of buildings - Non-industrial buildings
- **CSN 73 0833** Fire protection of buildings - Buildings for dwelling and lodging
- **CSN 73 0851** Determination of fire resistance of building constructions

3.2 More restrictive requirements in Czech legislation/regulations

In the Czech Republic the use of plastics piping systems for gaseous fuels supply is not consistent with:

- **Decree No. 137/1998**, on General Requirements for Construction

3.3 Contact point

The national body which is responsible for preparing national standards concerning all spheres and which is also the member of CEN is:

Czech Standards Institute (CSNI)
Biskupský dvůr 5
CZ-110 02 Praha 1
Czech Republic

Phone: +420 2 21 802 100
Fax: +420 2 21 802 3110
e-mail: u30-csni@login.cz

4 Page for Denmark

4.1 Relevant Danish legislation on gas installation to which EN 1775 is applicable

- Law 250/1978 on gas installations
- Technical regulations for installations in the domestic area, the Gas Regulations, Part A, of 1991, including updating with four amendments till February 1, 1999.
- Technical regulations for installations in the commercial and industrial areas, the Gas Regulations Part B-4, of October 1, 1998
- Regulations for gas companies, the Gas Regulations, Part C-10, of January 1, 1994

4.2 More restrictive requirements in Danish legislation

4.2.1 General

- The headlines in EN 1775 „Gas Supply - Gas pipework for buildings - Maximum operating pressure ≤ 5 bar“ are all covered by the Danish legal requirement, but not sufficiently, without detailed requirements.
- In nearly all areas, the Danish authorities cannot accept the only use of EN 1775.
- In Denmark „competent persons“ mean authorized companies, authorised by the Danish Governmental Gas Institute (DGP) according to law 250/1978.
- For domestic use the pressure of the installations must not exceed **100 mbar** (< 135 kW) and for commercial installations greater than 135 kW normally not 4 bar and under special conditions.
- All components in the installations must be stringently tested during production. It is **not** allowed to perform strength tests up to 5 bar, and certainly **not** with gas.
The whole philosophy for strength tests does not comply with Danish legal requirements.

4.2.2 Clauses to note regarding EN 1775:1998

Besides the clause, attached by the general statements, the following clauses are not in line with the Danish legal requirements:

- Clause 4.2 - Protection in case of fire, including Annex A
- Clause 8.1.1 - General recommendations

4.3 Contact point

Danmarks Gasmateriel Provning (DGP)
Danish Governmental Gas Institute
Trancgaardsvej 20
DK-2900 Hellerup

Tel: +45 39 62 43 65
Fax: +45 39 62 43 02
E-mail: dgp@dgp.dk

5 Page for Finland

5.1 Relevant Finnish legislation/regulations for gas installations

5.1.1 Statutes and regulations:

- a) **Natural Gas Decree**
1058/1993 (amendments 1171/1995 and 1092/1997)
- **Decision of the Ministry of Trade and Industry on implementation of the Natural Gas Decree**
(1059/1993)
- **Decision of the Ministry of Trade and Industry on gas installations** (1286/1993, amendment 1200/1286)

Source of supply:
Oy Edita Ab, P.O.Box 800, FIN-00043 EDITA

5.1.2 Detailed standards for EN 1775:

- a) **SFS 3178**
Natural gas pipeline. Inspection (1987-06-08)
- **SFS 3179** Gas pipeline systems, maximum pressure 4 bar. Installation of gas pipelines, appliances and equipment, pressure and leakage tests and commissioning (1991-11-11)

Source of supply:
Finnish Standards Association SFS, P.O.Box 116, FIN-00241 HELSINKI

5.2 More restrictive requirements in Finnish legislation/regulation

5.2.1 General

No detailed specification needed.

5.2.2 Clauses to note regarding to EN 1775:1998

No detailed specification needed.

5.3 Contact point

The national body which, for gas supply, is responsible for national standards and represents the national member of CEN (SFS) is:

Finnish Natural Gas Association
P.O.Box 392,
FIN-00101 HELSINKI

Tel.: +358 9 693 1711
Fax: +358 9 693 1083
e-mail: mky@maakaasu.fi

6 Page for France

6.1 Relevant French Legislations/regulations for gas pipework for buildings

6.1.1 Residential buildings

- **Code de la Construction et de l'habitation.**
- **Décret n° 62-608 du 23 mai 1962** fixant les règles techniques et de sécurité applicables aux installations de gaz combustible.
- **Arrêté du 2 août 1977** modifié fixant les règles techniques et de sécurité applicables aux installations de gaz combustible et d'hydrocarbures liquéfiés situées à l'intérieur des bâtiments d'habitation ou de leurs dépendances.
- **Arrêté du 23 juin 1978** relatif aux installations fixes destinées au chauffage et à l'alimentation en eau chaude sanitaire des bâtiments d'habitation, de bureaux ou recevant du public.
- **Arrêté du 15 juillet 1980** modifié rendant obligatoires des spécifications techniques relatives à la réalisation et à la mise en œuvre des canalisations de gaz à l'intérieur des bâtiments d'habitation ou de leurs dépendances.
- **Arrêté du 16 juillet 1980** modifié relatif à l'attribution de l'attestation d'aptitude concernant les installations de gaz situées à l'intérieur des bâtiments d'habitation ou de leurs dépendances.
- **Arrêté du 31 janvier 1986** modifié relatif à la protection contre l'incendie des bâtiments d'habitation.
- **Arrêté du 4 mars 1996** portant codification des règles de conformité des matériels à gaz aux normes les concernant lorsqu'ils sont situés à l'intérieur des bâtiments d'habitation et de leurs dépendances.

6.1.2 Public access buildings

- **Code de la Construction et de l'habitation.**
- **Code du travail.**
- **Décret n° 62-608 du 23 mai 1962** fixant les règles techniques et de sécurité applicables aux installations de gaz combustible.
- **Arrêté du 25 juin 1980** modifié portant règlement de sécurité contre l'incendie relatif aux établissements recevant du public (livres I et II).
- **Arrêté du 22 juin 1990** modifié portant règlement de sécurité contre l'incendie relatif aux établissements recevant du public (livre III).

6.1.3 High rise buildings

- **Code de la Construction et de l'habitation.**
- **Décret n° 62-608 du 23 mai 1962** fixant les règles techniques et de sécurité applicables aux installations de gaz combustible.
- **Arrêté du 18 octobre 1977** modifié portant règlement de sécurité pour la construction des IGH et leur protection contre les risques d'incendie et de panique.

6.1.4 Industrial buildings

- **Code du travail.**
- **Arrêté du 15 janvier 1962** modifié relatif à la réglementation des canalisations d'usines.
- **Décret n° 62-608 du 23 mai 1962** fixant les règles techniques et de sécurité applicables aux installations de gaz combustible.
- **Loi n° 76-663 du 19 juillet 1976** relative aux installations classées pour la protection de l'environnement.

Source of supply : Direction des Journaux Officiels, 26 rue Desaix – F 75727 PARIS Cedex 15.

6.1.5 Detailed code of practice for EN 1775:1998 is :

- Reference document **P 45 204: Document Technique Unifié n° 61.1**: Installations de gaz.

Source of supply : AFNOR Association Française de Normalisation, Tour Europe - F 92049 PARIS LA DEFENSE Cedex

6.2 More restrictive requirements in French legislation/regulation

6.2.1 General

No detailed specification needed.

6.2.2 Clauses to note regarding EN 1775:1998

No detailed specification needed.

6.3 Contact point

The national body which, for gas supply, is responsible for the drafting of national standards and represents the national member of CEN (AFNOR) is :

Bureau de Normalisation du Gaz (BNG)

ATG, Association Technique de l'Industrie du Gaz en France

62 rue de Courcelles,

F-75008 PARIS

Phone : +33 1 47 54 34 72

Fax : +33 1 42 94 04 30

7 Page for Germany

7.1 Relevant German legislation/regulations for gas installations

7.1.1 Federal law

- **Gesetz über die Elektrizitäts- und Gasversorgung** (Energiewirtschaftsgesetz - EnWG) vom 24.04.1998 (BGBl. I S. 730)
- **Verordnung über Allgemeine Bedingungen für die Gasversorgung von Tarifkunden** (AVBGasV) vom 21.06.1979 (BGBl. I S. 676)
- **Erste Verordnung zur Durchführung des Bundes-Immissionsschutzgesetzes** (Verordnung über Kleinf Feuerungsanlagen - 1. BlmschV) vom 15.07.1988 (BGBl. I S. 1059)

Source of supply:

Bundesanzeiger Verlagsges. mbH Bonn,
Bundesgesetzblatt, Postfach 13 20, 53003 Bonn

7.1.2 Law of the Federal Countries

- **Bauordnungen der Länder** (Building regulations of the German federal states)

Source of supply for the model regulation:

Werner-Verlag GmbH,
Karl-Rudolf-Straße 172, 40215 Düsseldorf

- **Feuerungsverordnungen der Länder** (Heating regulations of the German federal states)
- **Muster-Richtlinie über brandschutztechnische Anforderungen an Leitungsanlagen** (Muster-Leitungsanlagen-Richtlinie - MLAR)

Source of supply:

Deutsches Institut für Bautechnik,
Kolonnenstraße 30, 10829 Berlin

7.1.3 Health and safety specifications

- **VBG 1 "Allgemeine Vorschriften"**
- **VBG 15 "Schweißen, Schneiden und verwandte Arbeitsverfahren"**
- **VBG 37 "Bauarbeiten"**
- **VBG 50 "Arbeiten an Gasleitungen"**
- **VBG 52 „Anlagen für Gase der öffentlichen Gasversorgung“**
- **VBG 109 "Erste Hilfe"**