



National Standards Authority of Ireland
Údarás um Chaighdeáin Náisiúnta na hÉireann

IRISH STANDARD

I.S. EN 449:2002+A1:2007

ICS 97.100.20

**SPECIFICATION FOR DEDICATED LIQUEFIED
PETROLEUM GAS APPLIANCES - DOMESTIC
FLUELESS SPACE HEATERS (INCLUDING
DIFFUSIVE CATALYTIC COMBUSTION
HEATERS)**

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales
<http://www.standards.ie>

*This Irish Standard was
published under the authority
of the National Standards
Authority of Ireland and
comes into effect on:
7 December 2007*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
LAW**

© NSAI 2007

Price Code P

Údarás um Chaighdeáin Náisiúnta na hÉireann

This page is intentionally left BLANK.

I.S. EN 449:2002+A1:2007

EUROPEAN STANDARD

EN 449:2002+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2007

ICS 97.100.20

Supersedes EN 449:2002

English Version

**Specification for dedicated liquefied petroleum gas appliances -
Domestic flueless space heaters (including diffusive catalytic
combustion heaters)**

Spécifications pour les appareils fonctionnant
exclusivement aux gaz de pétrole liquéfiés - Appareils de
chauffage domestiques non raccordés (y compris les
appareils de chauffage à combustion catalytique diffusive)

Festlegungen für Flüssiggasgeräte - Abzuglose
Haushaltsraumheizgeräte (einschließlich Heizgeräte mit
diffusiver katalytischer Verbrennung)

This European Standard was approved by CEN on 9 September 2002 and includes Amendment 1 approved by CEN on 27 September 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.

CEN members are the national standards bodies of 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.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Classification	10
5 Safety and constructional requirements	11
6 Test methods	21
7 Marking and instructions	37
Annex A (normative) Special national conditions	43
Annex B (normative) Vitiation room	49
Annex C (informative) Air supply and ventilation – Using recommendations	51
Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives.	52

Foreword

This document (EN 449:2002+A1:2007) has been prepared by Technical Committee CEN/TC 181 "Dedicated liquefied petroleum gas appliances", the secretariat of which is held by AFNOR.

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 May 2008, and conflicting national standards shall be withdrawn at the latest by May 2008.

This document supersedes A1 EN 449:2002 A1.

This document includes Amendment 1, approved by CEN on 2007-09-27.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

A1 *deleted text* A1

Items relating to quality assurance systems, production testing and particularly certificates of conformity of auxiliary equipment are not covered by this standard.

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 the United Kingdom.

1 Scope

This European Standard specifies the requirements, the test methods and the marking of domestic flueless space heaters, including diffusive catalytic combustion heaters, having a nominal heat input (H_S), not exceeding 4,2 kW burning 3rd family gases at nominal operating pressures not exceeding 50 mbar, referred to in the text as 'appliances'.

This European Standard is applicable to the following types of appliances:

- a) fixed heaters burning commercial butane and/or commercial propane;
- b) portable or mobile heaters burning either commercial butane, or, commercial butane and commercial propane including those that incorporate a LPG container installation compartment for a transportable refillable liquefied petroleum LPG container.

There are no specific thermal efficiency requirements appropriate to these types of appliance as:

- c) all the heat produced by the combustion process is released into the space to be heated;
- d) the requirements with regard to the combustion performance, which is a safety matter, ensure the effective burning of the fuel gas.

It does not cover appliances incorporating electrically operated gas control systems.

Annex A gives the details of the categories of appliances marketed in various countries.

Requirements for appliances given in this standard assume that the supply of gas from the container will be governed by a pressure regulator having a maximum nominal outlet pressure of 50 mbar.

This European Standard does not cover LPG containers for liquefied petroleum gas neither their associated regulator nor tubing and flexible hoses which shall comply with national requirements in force.

This European Standard only covers type testing.

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 125, *Flame supervision devices for gas burning appliances - Thermo-electric flame supervision devices*

EN 126, *Multifunctional controls for gas burning appliances*

EN 161, *Automatic shut-off valves for gas burners and gas appliances*

EN 257, *Mechanical thermostats for gas burning appliances*

EN 437:1993, *Test gases - Test pressures - Appliance categories*

EN 549, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*

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*

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-