

<b>STN</b>	<b>Dekoračné kozuby na plynné palivá na tepelné pohodlie</b>	<b>STN EN 509</b>  06 1461
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Decorative fuel-effect gas appliances

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/25

Obsahuje: EN 509:2024

Oznámením tejto normy sa ruší  
STN EN 509 (06 1461) z decembra 2001

**139937**

EUROPEAN STANDARD

**EN 509**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2024

ICS 97.100.20

Supersedes EN 509:1999

English Version

## Decorative fuel-effect gas appliances

Appareils à effet décoratif de combustion utilisant les combustibles gazeux

Dekorative Gasgeräte mit Brennstoffeffekt

This European Standard was approved by CEN on 15 April 2024.

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## EN 509:2024 (E)

### European foreword

This document (EN 509:2024) has been prepared by Technical Committee CEN/TC 62 “Independent gas-fired space heaters”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by April 2025 and conflicting national standards shall be withdrawn at the latest by April 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 509:1999.

The main changes compared to EN 509:1999 are the following:

- Clause 1 - the Scope has been extended to cover Type B<sub>BS</sub> appliances which are covered in a new Annex F;
- 3.2 - all terms and definitions related to gas in EN 509:1999, 3.2 have been deleted and replaced by reference to EN 437:2021;
- 3.4 and 3.5 have been deleted and the definitions, which were considered necessary, retained and included in 3.2 and 3.3 as appropriate;
- 3.6 has been deleted;
- 4.1 - original text has been replaced by reference to EN 437:2021;
- 4.2 - classification has been extended to type C<sub>31</sub> and type C<sub>91</sub> appliances;
- 5.1.1.4 has been deleted;
- 7.1.1 and 7.1.2 - original text has been replaced by reference to EN 437:2021;
- Annexes A, B, D and G have been deleted;
- Annex F has been added to cover Type B<sub>BS</sub> appliances.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

## 1 Scope

This document specifies the requirements and test methods for the construction, safety, and marking of decorative fuel effect gas appliances not exceeding a nominal heat input of 20 kW (based on the net calorific value), thereafter referred to as appliances.

This document is applicable to appliances that are designed to simulate a solid fuel fire and incorporate a natural draught burner with or without an ignition burner, that uses one or more combustible gases of the three gas families at the pressures stated in EN 437:2021. The appliances are for decorative purposes only and are not heating appliances.

This document is applicable to type B<sub>AS</sub>, as described in 4.2, decorative fuel effect gas appliances that are designed to be installed within a non-combustible builder's opening or a non-combustible fireplace recess.

NOTE 1 This document specifies special national conditions in Annex C for appliances of category I<sub>2E+</sub>, marketed in Belgium.

NOTE 2 This document specifies special A-deviations in Annex D for appliances in Switzerland which require additional requirements for subclauses 6.6 and 6.7.

This document includes additional requirements for Type B<sub>BS</sub> appliances which are specified in Annex F.

In addition, this document is applicable to decorative fuel-effect gas appliances that are designed to be installed under a non-combustible canopy which is independent or integral with a flue box, for which additional requirements are specified in Annex A.

The use of toxic gases is not covered.

This document is not applicable to:

- catalytic combustion appliances;
- appliances in which the supply of combustion air and/or the evacuation of products of combustion is achieved by mechanical means.

NOTE 3 Requirements concerning the rational use of energy have not been included in this document, because the appliances are for decorative purposes.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 88-1:2022+A1:2023, *Safety and control devices for gas burners and gas burning appliances — Part 1: Pressure regulators for inlet pressures up to and including 50 kPa*

EN 125:2022, *Flame supervision devices for gas burning appliances — Thermoelectric flame supervision devices*

EN 126:2012, *Multifunctional controls for gas burning appliances*

EN 161:2022, *Automatic shut-off valves for gas burners and gas appliances*

EN 298:2022, *Automatic burner control systems for burners and appliances burning gaseous or liquid fuels*



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EN 437:2021, *Test gases — Test pressures — Appliance categories*

EN 751-1:1996, *Sealing materials for metallic threaded joints in contact with 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> family gases and hot water — Part 1: Anaerobic jointing compounds*

EN 751-2:1996, *Sealing materials for metallic threaded joints in contact with 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> family gases and hot water — Part 2: Non-hardening jointing compounds*

EN 1106:2022+A1:2023, *Manually operated taps for gas burning appliances*

EN 10226-1:2004, *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 10226-2:2005, *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 10305-1:2016, *Steel tubes for precision applications — Technical delivery conditions — Part 1: Seamless cold drawn tubes*

EN 60335-1:2012,<sup>1</sup> *Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1:2010)*

EN 60335-2-102:2016, *Household and similar electrical appliances — Safety — Part 2-102: Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections (IEC 60335-2-102:2004, IEC 60335-2-102:2004/A1:2008, IEC 60335-2-102:2004/A2:2012)*

EN 60529:1991,<sup>2</sup> *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

EN ISO 228-1:2003, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)*

EN ISO 3166-1:2020, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code (ISO 3166-1:2020)*

ISO 7-1:1994,<sup>3</sup> *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**

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<sup>1</sup> As impacted by EN 60335-1:2012/A11:2014, EN 60335-1:2012/A13:2017, EN 60335-1:2012/A1:2019, EN 60335-1:2012/A14:2019, EN 60335-1:2012/A2:2019 and EN 60335-1:2012/A15:2021.

<sup>2</sup> As impacted by EN 60529:1991/A1:2000 and EN 60529:1991/A2:2013/AC:2019-02.

<sup>3</sup> As impacted by ISO 7-1:1994/Cor 1:2007.