



SLOVENSKI STANDARD
SIST EN 419-1:1999/A2:2002
01-april-2002

**Stropna plinska sevala z zgorevanjem na površini za nestanovanjske prostore – 1.
del: Varnost - Dopolnilo A2**

Non-domestic gas-fired overhead luminous radiant heaters - Part 1: Safety

Gasgeräte-Heizstrahler - Hellstrahler mit Brenner ohne Gebläse für gewerbliche und industrielle Anwendung - Teil 1: Sicherheit

Appareils surélevés de chauffage à rayonnement lumineux au gaz à usage non domestique - Partie 1: Sécurité

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 419-1:1999/A2:2001

ICS:

97.100.20

SIST EN 419-1:1999/A2:2002

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 419-1:1999/A2:2002

<https://standards.iteh.ai/catalog/standards/sist/6ea57f23-cf53-4e9f-8810-0eba643a733f/sist-en-419-1-1999-a2-2002>

ICS 97.100.20

English version

Non-domestic gas-fired overhead luminous radiant heaters - Part 1: Safety

Appareils surélevés de chauffage à rayonnement lumineux
au gaz à usage non domestique - Partie 1: Sécurité

Gasgeräte-Heizstrahler - Hellstrahler mit Brenner ohne
Gebläse für gewerbliche und industrielle Anwendung - Teil
1: Sicherheit

This amendment A2 modifies the European Standard EN 419-1:1999; it was approved by CEN on 9 June 2001.

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

This amendment 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 Management Centre has the same status as the official versions.

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.

[SIST EN 419-1:1999/A2:2002](https://standards.iteh.ai/catalog/standards/sist/6ea57f23-cf53-4e9f-8810-0eba643a733f/sist-en-419-1-1999-a2-2002)

<https://standards.iteh.ai/catalog/standards/sist/6ea57f23-cf53-4e9f-8810-0eba643a733f/sist-en-419-1-1999-a2-2002>



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

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

Foreword

This Amendment EN 419-1:1999/A2:2001 to EN 419-1:1999 has been prepared by Technical Committee CEN/TC 180 "Non-domestic gas-fired overhead radiant 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 January 2002, and conflicting national standards shall be withdrawn at the latest by January 2002.

This Amendment to the European Standard EN 419-1:1999 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).

This Amendment modifies EN 419-1:1999. It has been prepared to incorporate general amendments to EN 419-1:1999 and EN 437:1993 + A1: 1997 + A2: 1999.

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.

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

SIST EN 419-1:1999/A2:2002
<https://standards.iteh.ai/catalog/standards/sist/6ea57f23-cf53-4e9f-8810-0eba643a733f/sist-en-419-1-1999-a2-2002>

Contents

Delete annex C:

'Annex C (normative) Extract from prEN 50165:1995 'Electrical equipment of non-electrical heating appliances for household and similar purposes. Safety requirements''.

Re-letter annex D and annex E as follows :

"Annex C (informative) Identification of the types of gas in use in the various countries
Annex D (normative) Special national conditions"

Re-letter annex F and annex G as follows:

"Annex E (informative) Example of calculation of the weighing factors for an appliance with several rates
Annex F (informative) Calculation of conversions of No_x"

Add the following annex G :

"Annex G (informative) National situations of countries whose national bodies are CEN associate members".

Foreword

iTeh STANDARD PREVIEW

Replace the penultimate paragraph by the following:

'The test gases, test pressures and appliance categories given in this European Standard are in accordance with those specified in EN 437:1993 + A1:1997 + A2:1999 'Test gases - Test pressures - Appliance categories'.

2 Normative references

Amend the reference to EN 257 and EN 437 as follows:

'EN 257:1992 + A1:1996 Mechanical thermostats for gas-burning appliances

EN 437:1993 + A1:1997 + A2:1999 Test gases – Test pressures – Appliance categories'.

Amend the reference to prEN 50165 as follows:

'EN 50165:1997/A1:2001 Electrical equipment of non-electrical heating appliances for household and similar purposes. Safety requirements, Amendment 1'.

Add the following references:

'ISO 7005-1:1992 Metallic flanges – Part 1: Steel flanges

ISO 7005-2:1988 Metallic flanges – Part 2: Cast iron flanges

ISO 7005-3:1988 Metallic flanges – Part 3: Copper alloy and composite flanges'.

Delete the following references:

'EN 60730-1:1995' and 'EN 61058-1:1992'.

3 Definitions

In definitions 3.4.1, 3.4.2, 3.4.3, and 3.4.4 replace:

'[EN 437:1993]' by '[EN 437:1993 + A2:1999]'.

In definition 3.4.3, reword the title and unit to read:

'Volume flow rate

Unit: cubic metre per hour (m³/h), litre per minute (l/min), cubic decimetre per hour (dm³/h) or cubic decimetre per second (dm³/s)'.

Replace definition 3.4.22 by the following:

'3.4.22

extinction safety time

the time which elapses between the moment when the supervised flame is extinguished and the moment when:

- for an appliance without an automatic burner control system, the gas supply is shut-off:
 - to the main burner;
 - and/or to the ignition burner;
- or for an appliance with an automatic burner control system, the control system initiates shut-down of the burner by removing power to the automatic gas shut-off valves'.

In definitions 3.5.1, 3.5.3, 3.5.4, 3.5.5, 3.5.6 and 3.5.7 replace:

'[EN 437:1993]' by '[EN 437:1993 + A2:1999]'.

In the first line of definition 3.5.1, add

'complete' before 'combustion'.

5.1.6 Inlet connections

Add a new indent, indent e) to read:

'e) a flange to ISO 7005-1:1992, ISO 7005-2:1988 or ISO 7005-3:1988.'

5.1.8 Electrical equipment

Replace paragraphs 1 and 2 by the following paragraph:

'The electrical equipment of the appliance shall be so designed and constructed as to obviate hazards of electrical origin and shall comply with the requirements of EN 50165:1997/A1:2001 which cover such hazards.'

7.1.1 Characteristics of test gases: reference and limit gases

In paragraph 2, replace:

'EN 437:1993' by 'EN 437:1993 + A2:1999'.

7.1.4 Test pressures

In paragraph 2, in parenthesis replace :

"annex E" by "annex D" and add "and annex G for national situations of countries whose national bodies are CEN associate members".

Table 6 Test pressures when a pressure couple exists

In footnote 2, replace:

"annex E" by "annex D".

7.1.5.1 Tests requiring the use of reference gas

In the first sentence, delete

'7.2.3,'.

Table 8 Symbol of the type of gas

In the list of first family gases, delete:

'G 140 1d'.

7.3.1 General

In the definition for $NO_{x,m}$, in the note, replace:

'annex G' by 'annex F'.

7.3.2.3 Appliances with several rates

In the final paragraph in parenthesis, replace:

'annex F' by 'annex E' and 'annex G' by 'annex F'.

8.1.4.2 Type of gas

In the final paragraph replace :

"annex D" by "annex C"

8.1.4.4 Country of destination

In the list, after Switzerland add:

'CZ Czech Republic'.

8.1.4.5 Category

Replace:

'EN 437:1993' by 'EN 437:1993 + A2:1999'.

Table A.1.1 Single categories marketed

Replace the table by the following table:

Table A.1.1 — Single categories marketed

Country	I _{2H}	I _{2L}	I _{2E}	I _{2E+}	I _{3B/P}	I ₃₊	I _{3P}
AT	X				X		
BE				X		X	X
CH	X				X	X	X
CZ	X				X		X
DE			X		X		X
DK	X				X		
ES	X					X	X
FI	X				X		
FR	X ²⁾	X ²⁾		X	X ¹⁾	X	X
GB	X					X	X
GR	X					X	X
IE	X					X	X
IS							
IT	X					X	
LU			X				
NL	X ²⁾	X			X		X
NO					X		
PT	X					X	X
SE	X				X		

¹⁾ Categories applicable only to certain types of appliance specified in the individual standards. (France to specify).

²⁾ Categories applicable only to certain types of appliance, submitted to on site EC verification procedure, Annex II article 6 of the Gas Appliance Directive (90/396/EE). (France and Netherlands to clarify if applicable here).

<https://standards.iteh.ai/catalog/standards/sist/6ea57f23-cf53-4e9f-8810-0eba643a733f/sist-en-419-1-1999-a2-2002>

Table A.1.2 Double categories marketed

Replace the table by the following table:

Table A.1.2 — Double categories marketed

Country	II _{1a2H}	II _{2H3B/P}	II _{2H3+}	II _{2H3P}	II _{2L3B/P}	II _{2L3P}	II _{2E3B/P}	II _{2E+3B/P}	II _{2E+3+}	II _{2E+3P}
AT		X								
BE										
CH	X	X	X	X						
CZ		X		X						
DE							X			
DK	X	X								
ES	X		X ³⁾	X						
FI		X								
FR				X ²⁾		X ²⁾		X ¹⁾	X	X
GB			X	X						
GR		X	X	X						
IE			X	X						
IS										
IT	X		X							
LU										
NL					X	X				
NO										
PT			X	X						
SE	X	X								

^{1), 2)} See notes to Table A.1.1.

³⁾ Appliances of this category set for group H gases of the second family may use air and commercial propane gas mixtures where the gross Wobbe index (at 15° C and 1 013, 25 mbar) is between 46 MJ/m³ and 51,5 MJ/m³, at the same supply pressure, without additional tests.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 419-1:1999/A2:2002

<https://standards.iteh.ai/catalog/standards/sist/6ea57f23-cf53-4e9f-8810-0eba643a733f/sist-en-419-1-1999-a2-2002>

Table A.2 Normal supply pressures

Replace the table by the following table:

Table A.2 – Normal supply pressures

Gas	G 110	G 20	G 25		G 20 + G 25	G 30		G 31			G 30 + G 31	
			20	25		30	50	30	37	50	Couple 28- 30/37	Couple 50/67
Pressure (mbar)	8	20	20	25	Couple 20/25	30 28- 30	50	30	37	50	Couple 28- 30/37	Couple 50/67
Country												
AT		X					X			X		
BE					X				X	X ²⁾	X	X
CH	X	X					X			X	X	
CZ		X ³⁾					X ⁴⁾	X	X	X ⁵⁾		
DE		X	X			X	X			X		
DK	X	X						X				
ES	X	X				X			X	X ²⁾	X	
FI		X				X		X				
FR					X	X	X ²⁾		X	X ²⁾	X	
GB		X ¹⁾				X			X	X	X	
GR		X				X		X	X	X	X	
IE		X				X			X		X	
IS						X						
IT	X	X									X	
LU		X										
NL								X		X		
NO						X		X				
PT		X				X			X		X	
SE	X	X				X		X				

¹⁾ Normal supply pressure for this appliance: 17,5 mbar.
²⁾ Only for certain types of non-domestic appliance. (Countries to clarify).
³⁾ Currently 18 mbar.
⁴⁾ For certain types of industrial appliances. (CZ to clarify).
⁵⁾ For certain types of appliance. (CZ to clarify).

Table A.3 Test gases corresponding to categories marketed nationally or locally

Replace the table with the following table:

Table A.3 — Test gases corresponding to categories marketed nationally or locally

Category	Reference gas	Incomplete combustion limit gas	Light back limit gas	Lift limit gas	Sooting limit gas	Country
I _{2Esi} , I _{2Er}	G 20, G 25	G 21	G 222	G 231	G 21	FR
I _{2E(S)B}	G 20, G 25	G 21	G 222	G 231	G 21	BE
I _{2E(R)B}	G 20, G 25	G 21	G 222	G 231	G 21	BE
I _{2ELL}	G 20, G 25	G 21	G 222	G 231 G 271	G 21	DE
II _{1c2H}	G 130, G 20	G 21	G 132, G 222	G 23	G 21	CH
II _{1c2E+}	G 130, G 20	G 21	G 132, G 222	G 231	G 21	FR
II _{1c2Esi}	G 130	G 21	G 132	G 231	G 21	FR
II _{1c2Er}	G 20, G 25		G 222			
II _{2Esi3+}	G 20, G 25	G 21	G 222	G 231	G 30	FR
II _{2Er3+}	G 30		G 32	G 31		
II _{2Esi3P}	G 20, G 25	G 21	G 222	G 231	G 31	FR
II _{2Er3P}	G 31		G 32	G 271	G 32	
II _{2ELL3B/P}	G 20, G 25 G 30	G 21 G 30	G 222 G 32	G 231 G 271	G 30	DE
III _{1a2H3B/P}	G 110, G 20 G 30	G 21	G 112 G 222, G 32	G 23 G 31	G 30	DK, IT
III _{1c2H3B/P}	G 130, G 20 G 30	G 21	G 132 G 222, G 32	G 23 G 31	G 30	CH
III _{1c2H3+}	G 130, G 20 G 30	G 21	G 132 G 222, G 32	G 23 G 31	G 30	CH
III _{1c2H3P}	G 130, G 20 G 30	G 21	G 132 G 222, G 32	G 23 G 31	G 31 G 32	CH
III _{1c2E+3+}	G 130, G 20 G 30	G 21	G 132 G 222, G 32	G 231 G 31	G 30	FR
III _{1c2E+3P}	G 130, G 20 G 31	G 21	G 132 G 222, G 32	G 231 G 31	G 32	FR
III _{1c2Esi3+}	G 130, G 20	G 21	G 132	G 231	G 30	FR
III _{1c2Er3+}	G 25, G 30		G 222, G 32	G 31		
III _{1c2Esi3P}	G 130, G 20	G 21	G 132	G 231	G 32	FR
III _{1c2Er3P}	G 25, G 31		G 222, G 32	G 31		
III _{1ab2H3B/P}	G 110, G 120 G 20, G 30	G 21	G 112 G 222, G 32	G 23 G 31	G 30	SE
III _{1c2H3+}	G 150, G 20, G 30	G 21	G 152 G 222, G 32	G 23 G 31	G 30	ES
III _{1ace2H3+}	G 110, G 130 G 150, G 20 G 30	G 21	G 112 G 222, G 32	G 23 G 31	G 30	ES