



National Standards Authority of Ireland
Údarás um Chaighdeáin Náisiúnta na hÉireann

IRISH STANDARD

I.S. EN 15287-2:2008

ICS 91.060.40

National Standards
Authority of Ireland
Northwood, Dublin 9
Ireland

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

Sales

<http://www.standards.ie>

**CHIMNEYS - DESIGN, INSTALLATION AND
COMMISSIONING OF CHIMNEYS - PART 2:
CHIMNEYS FOR ROOMSEALED APPLIANCES**

*This Irish Standard was
published under the authority
of the National Standards
Authority of Ireland and
comes into effect on:
18 June 2008*

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

© NSAI 2008

Price Code X

Údarás um Chaighdeáin Náisiúnta na hÉireann

This page is intentionally left BLANK.

ICS 91.060.40

English Version

Chimneys - Design, installation and commissioning of chimneys - Part 2: Chimneys for roomsealed appliances

Cheminées - Conception, installation et mise en service
des conduits de fumée - Partie 2 : Conduits de fumée pour
chaudières étanches

Abgasanlagen - Planung, Montage und Abnahme von
Abgasanlagen - Teil 2: Abgasanlagen für
raumluftunabhängige Feuerstätten

This European Standard was approved by CEN on 10 February 2008.

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.....	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	7
4 Design	9
4.1 General.....	9
4.2 Data requirements	9
4.2.1 Sources of data and information.....	9
4.2.2 Heating appliance information	9
4.2.3 Chimney system product specification.....	10
4.2.4 Building construction and chimney system route information	10
4.2.5 Local conditions	13
4.3 Design requirements	14
4.3.1 General.....	14
4.3.2 Chimney system designation.....	14
4.3.3 Properties of construction of the chimney	16
4.3.4 Chimney system sizing and characteristics for roomsealed applications.....	19
4.3.5 Chimney system route	19
4.3.6 Connecting flue pipe and connection air supply pipe route.....	19
4.3.7 Resistance to fire (external to external)	20
4.3.8 Distance to combustible material (Resistance to fire internal to external)	20
4.3.9 Accidental human contact.....	21
4.3.10 Accidental ignition of extraneous loose material.....	21
4.3.11 Supports	21
4.3.12 Joints	22
4.3.13 Chimney offset.....	22
4.3.14 Access for inspection, cleaning and measuring	22
4.3.15 Distance between openings in the chimney system.....	22
4.3.16 Back ventilation	23
4.3.17 Location of chimney outlet.....	23
4.3.18 External parts	24
4.3.19 Weatherproofing	24
4.3.20 Lightning protection.....	25
4.3.21 Earthing of chimney systems.....	25
4.3.22 Silencer	25
4.3.23 Condensate drainage system.....	25
4.3.24 Rain cap	25
4.3.25 Rainwater disposal	26
4.3.26 Terminals	26
4.4 Chimney plate and additional information	26
5 Installation	27
5.1 General.....	27
5.2 Construction of relined or converted chimney systems	27
5.3 Chimney plate	27
6 Commissioning/handover.....	28
Annex A (normative) Determination of the chimney and connecting flue pipe system designation and essential additional information for custom built, relined and converted chimney systems, for concentric flue/air supply duct configuration	29

A.1	General	29
A.2	Temperature class	29
A.3	Pressure class	40
A.4	Resistance to condensate class	40
A.5	Corrosion resistance class.....	40
A.6	Sootfire resistance class	40
A.7	Distance to combustible material	41
A.8	Thermal resistance of the flue duct.....	41
A.9	Coefficient of flow resistance of the flue duct.....	41
A.10	Thermal resistance of the air supply duct	41
A.11	Coefficient of flow resistance of the air supply duct.....	41
Annex B (informative) Information for the heating appliance(s)		42
Annex C (informative) Example of system chimney product designation		44
Annex D (informative) Correlation between designation parameters for clay/ceramic flue liners and clay/ceramic flue blocks and concrete flue blocks		45
Annex E (informative) Designation of metal system chimneys and correlation between metal liner material designation and corrosion load in Member States (MS)		47
Annex F (informative) Example of chimney system designation for roomsealed applications		53
Annex G (informative) Example for chimney system plate.....		54
G.1	Example of a concentric chimney system configuration plate	54
G.2	Example of a separate chimney system configuration plate.....	54
Annex H (normative) Determination of the chimney designation for a completed metal system chimney		55
H.1	General	55
H.2	Corrosion resistance class.....	55
Annex I (informative) Example of the determination of the designation of a converted/relined chimney system.....		56
I.1	Input data for a typical converted/relined chimney	56
I.1.1	Existing chimney	56
I.1.2	Liner	56
I.1.3	Insulation.....	56
I.2	Temperature class designation	57
I.2.1	General	57
I.2.2	Material characteristic.....	57
I.2.3	Fire protection	58
I.2.4	Human contact.....	59
I.2.5	Determination of temperature class	59
I.2.6	Check of mean temperatures	59
I.3	Pressure class designation	61
I.4	Resistance to condensate class designation.....	61
I.5	Corrosion resistance class designation	61
I.6	Sootfire resistance class	61
I.7	Distance to combustible material	61
I.8	Designation of the converted/relined chimney	62
I.9	Chimney plate of the converted/relined chimney in this annex	62
Annex J (informative) Example for the determination of the designation of a custom built chimney system.....		63
J.1	Input data for a custom-built chimney system.....	63
J.1.1	Liner	63
J.1.2	Insulation.....	63
J.1.3	Air supply duct	63
J.1.4	Combustible wall	63
J.2	Temperature class designation	64
J.2.1	General	64
J.2.2	Material characteristic.....	64

I.S. EN 15287-2:2008**EN 15287-2:2008 (E)**

J.2.3	Resistance to fire	64
J.2.4	Human contact	66
J.2.5	Determination of temperature class	66
J.2.6	Check of mean temperatures	66
J.3	Pressure class designation	68
J.4	Resistance to condensate class designation	68
J.5	Corrosion resistance class designation	68
J.6	Sootfire resistance class	68
J.7	Distance to combustible material	68
J.8	Designation of the custom-built chimney	69
J.9	Chimney plate for the custom-built chimney in this annex	69
Annex K (informative) Location of outlets of chimney systems		70
Annex L (informative) Method for calculating the temperature of adjacent materials		74
L.1	Method for the calculation of the temperature of adjacent materials	74
L.2	Example for calculation of the temperature of adjacent materials	76
Annex M (informative) Checking, handling and site storage of materials and components		78
M.1	General	78
M.2	Checking, handling and site storage of materials and components	78
M.2.1	Checking on delivery of materials	78
M.2.2	Checking before installation	78
M.2.3	Check of existing chimney	78
M.2.4	Site handling and storage	78
M.2.5	Coordination of work	79
Annex N (informative) Chimney commissioning		80
N.1	General	80
N.2	Physical checks	80
N.3	Operational checks	81
N.3.1	Flue flow test	81
N.3.2	Smoke test	81
N.3.3	Gas tightness test	82
Method B: O₂ measurement in concentric air supply ducts for gas		82
Annex O (informative) Recommendations for inspection, cleaning and maintenance		84
O.1	General	84
O.2	Inspection and cleaning	84
O.3	Maintenance	84
Bibliography		85

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](#)
-