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Chimneys - Design, installation and commissioning - Part 1: Chimneys and connecting flue pipes for non-room sealed combustion appliances

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

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English Version

Chimneys - Design, installation and commissioning - Part 1: Chimneys and connecting flue pipes for non-room sealed combustion appliances

Conduits de fumée - Conception, installation et mise en service - Partie 1: Conduits de fumée et conduits de raccordement pour appareils de combustion qui prélèvent l'air comburant dans la pièce

Abgasanlagen - Planung, Montage und Abnahme - Teil 1: Senkrechte Teile von Abgasanlagen und Verbindungsstücke für raumluftabhängige Verbrennungseinrichtungen

This European Standard was approved by CEN on 5 June 2023.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 15287-1:2023 (E)

Contents		Page
European foreword		5
Introduction		6
1	Scope	7
2	Normative references	7
3	Terms and definitions	8
4	Design	16
4.1	General	16
4.2	Characteristics	16
4.2.1	Designation of an installed chimney	16
4.2.2	Temperature classes	16
4.2.3	Pressure classes	17
4.2.4	Condensate resistance classes	17
4.2.5	Corrosion resistance classes	18
4.2.6	Sootfire resistance classes	18
4.2.7	Minimum distance to combustible material	18
4.3	Required information	19
4.3.1	Sources of data and information	19
4.3.2	Local conditions	19
4.3.3	Combustion appliance information	19
4.3.4	Combustion air supply	19
4.3.5	Building structure and chimney route	19
4.3.6	Existing chimney	20
4.3.7	Chimney product specification	20
4.4	Design requirements	20
4.4.1	General	20
4.4.2	Route of the chimney and the connecting flue pipe	20
4.4.3	Designation classes	22
4.4.4	Materials of construction	23
4.4.5	Chimney sizing and characteristics	24
4.4.6	Installation requirements	24
4.4.7	Accessories	29
4.5	Chimney plate and additional information	32
5	Installation	33
5.1	General	33
5.2	Construction of relined chimneys	33
5.3	Chimney plate	33
6	Commissioning/handover	34
Annex A (informative) Terminology		35
Annex B (informative) List of combustion appliance data required for the design of a chimney		38
B.1	For choosing the chimney type (required chimney designation)	38
B.2	For calculation of the chimney (sizing, see 4.4.5)	38

B.3	For combustion appliance/connecting flue pipe/chimney adapter design/choice.....	38
Annex C (informative)	Example of typical building structure designed to assist exchange of information.....	39
Annex D (informative)	Location of chimney outlets.....	42
Annex E (informative)	Correlation between the product designation of metal system chimneys, liners and connecting flue pipes and the corrosion loads in Member States (MS).....	46
Annex F (informative)	Correlation between type of flue liner according to the designation of parameters for clay/ceramic flue liners, clay/ceramic flue blocks and concrete flue blocks and the designation according to EN 1443.....	53
Annex G (informative)	Example for chimney plates.....	55
Annex H (informative)	Determination of the chimney designation for custom-built and relined chimneys.....	56
H.1	General.....	56
H.2	Temperature class.....	56
H.3	Pressure class.....	64
H.4	Condensate resistance class.....	65
H.5	Corrosion resistance class.....	65
H.6	Sootfire resistance class.....	65
H.7	Minimum distance to combustible material.....	66
Annex I (informative)	Example for the determination of the designation of a relined chimney using a metal flue liner.....	67
I.1	Input data for a typical relined chimney.....	67
I.2	Temperature class.....	68
I.3	Pressure class.....	70
I.4	Condensate resistance class.....	70
I.5	Corrosion resistance class.....	70
I.6	Sootfire resistance class.....	70
I.7	Minimum distance to combustible material.....	70
I.8	Designation of the relined chimney.....	71
I.9	Chimney plate of the relined chimney in this example.....	71
Annex J (informative)	Example for the determination of the designation of a custom-built chimney using a clay/ceramic flue liner.....	72
J.1	Input data for a custom-built chimney.....	72
J.2	Temperature class.....	72
J.3	Pressure class.....	74
J.4	Condensate resistance class.....	74
J.5	Corrosion resistance class.....	74
J.6	Sootfire resistance class.....	75

EN 15287-1:2023 (E)

J.7	Minimum distance to combustible material	75
J.8	Designation of the custom-built chimney	75
J.9	Chimney plate for the custom-built chimney in this example	75
Annex K (informative) Minimum distances to combustible material		76
K.1	Connecting flue pipes without designation according to 4.2	76
K.2	Access components	76
K.3	Plastic flue liners in a chimney stack	77
Annex L (informative) Calculating the temperature of adjacent material		79
L.1	Example for calculation of the temperature of adjacent material (e.g. weatherproofing)	79
L.2	Example for calculation of the temperature of adjacent materials (e.g. weatherproofing)	80
Annex M (informative) Useful hints for handling of materials and components on site		82
M.1	General	82
M.2	Check of existing chimney	82
M.3	Checking before installation	82
M.4	Checking on delivery of materials	82
M.5	Site handling and storage	82
M.6	Coordination of work	83
Annex N (informative) Chimney commissioning		84
N.1	General	84
N.2	Physical checks	84
N.3	Operational checks	85
Annex O (informative) Recommendations for inspection, cleaning and maintenance		88
O.1	General	88
O.2	Inspection and cleaning	88
O.3	Maintenance	88
Annex P (informative) Flue damper		89
P.1	General	89
P.2	Flue damper types	90
P.3	Additional information for the use of a flue damper type 2 and 4	92
Annex Q (informative) Terminals		94
Q.1	Terminal types	94
Q.2	Required information	94
Bibliography		96

European foreword

This document (EN 15287-1:2023) has been prepared by Technical Committee CEN/TC 166 “Chimneys”, the secretariat of which is held by ASI.

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 2024 and conflicting national standards shall be withdrawn at the latest by January 2024.

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 will supersede EN 15287-1:2007+A1:2010.

This European Standard is part of the series *Chimneys — Design, installation and commissioning*:

- *Part 1: Chimneys and connecting flue pipes for non-room sealed combustion appliances;*
- *Part 2: Chimneys and connecting flue pipes for room sealed combustion appliances.*

In comparison with the previous edition, the following technical modifications have been made:

- a) restructuring of the chapters and annexes;
- b) harmonization of the text with part 2;
- c) updating the content according to EN 1443:2019;
- d) adoption of all relevant terms from EN 1443:2019;
- e) description of the designation and classes of a chimney according to EN 1443:2019;
- f) expanding the specifications for accessories;
- g) recommendations for some minimum distances from combustible material;
- h) scope now also covers chimneys for medium and high positive pressure.

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.

EN 15287-1:2023 (E)**Introduction**

CEN/TC 166 started with its programme on standardization of chimneys approximately 30 years ago, with standards for interfaces, for products, for tests and last but not least for design, installation, construction and commissioning matters.

In the last years, first priority in the work program was given to product and test standards.

In the meantime, most of the product and test standards were published or are nearly ready for publication. In order to introduce the products in a simple way on the markets of the different Member States, some common rules for design, installation, and commissioning especially with reference to the designation of a chimney were considered helpful.

Initially, CEN/TC 166/SC 2 started the work on execution standards for metal chimneys, the first standard being EN 12391-1 in 2003.

In order not to repeat this work in all material orientated WGs and SCs, CEN/TC 166 decided in 2002 to give the task to WG 1 to develop a material independent design, installation and commissioning standard.

CEN/TC 166/WG 1 started the work in 2003 and decided first to draft two documents, one for chimneys connected to non-room sealed combustion appliances and one for chimneys connected to room sealed combustion appliances.

Application of this document presupposes awareness of applicable legal requirements in the different CEN Member States and its affiliates. In CEN Member States and its affiliates where no applicable legal requirements exist, this document provides guidance for the design, installation and commissioning of chimneys.

NOTE Where “Member States” is mentioned in this document this also includes affiliates.

1 Scope

This document describes the method of specifying the design, installation and labelling criteria for system chimneys, construction of custom-built chimneys, the relining of existing chimneys and connecting flue pipes for non-room sealed combustion appliances as well as the use of chimney products. It also gives information on commissioning of an installed chimney.

This document applies to chimneys which are subject to the following limiting conditions:

- the distance between the supports not to exceed 4 m;
- the distance above the last structural attachment not to exceed 3 m;
- the free-standing height above the uppermost structural support attachment for chimneys with rectangular cross section is not more than five times the smallest external dimension.

The methods in this part of this document are applicable to chimneys and connecting flue pipes for non-room sealed combustion appliances. The methods in Part 2 of this document are applicable to chimneys and connecting flue pipes for room sealed combustion appliances.

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 1443:2019, *Chimneys - General requirements*

EN 1457-1, *Chimneys - Clay/ceramic flue liners - Part 1: Flue liners operating under dry conditions - Requirements and test methods*

EN 1457-2, *Chimneys - Clay/ceramic flue liners - Part 2: Flue liners operating under wet conditions - Requirements and test methods*

EN 1806, *Chimneys - Clay/ceramic flue blocks for single wall chimneys - Requirements and test methods*

EN 1856-1, *Chimneys - Requirements for metal chimneys - Part 1: System chimney products*

EN 1856-2, *Chimneys - Requirements for metal chimneys - Part 2: Metal flue liners and connecting flue pipes*

EN 1857, *Chimneys - Components - Concrete flue liners*

EN 1858, *Chimneys - Components - Concrete flue blocks*

EN 12446, *Chimneys - Components - Concrete outer wall elements*

EN 13063-1, *Chimneys - System chimneys with clay/ceramic flue liners - Part 1: Requirements and test methods for sootfire resistance*

EN 13063-2, *Chimneys - System chimneys with clay/ceramic flue liners - Part 2: Requirements and test methods under wet conditions*

EN 13069, *Chimneys - Clay/ceramic outer walls for system chimneys - Requirements and test methods*

EN 13084-1, *Free-standing chimneys - Part 1: General requirements*

EN 15287-1:2023 (E)

EN 13216-1, *Chimneys - Test methods for system chimneys - Part 1: General test methods*

EN 13384-1, *Chimneys - Thermal and fluid dynamic calculation methods - Part 1: Chimneys serving one combustion appliance*

EN 13384-2, *Chimneys - Thermal and fluid dynamic calculation methods - Part 2: Chimneys serving more than one combustion appliance*

EN 13502, *Chimneys - Requirements and test methods for clay/ceramic flue terminals*

EN 14297, *Chimneys - Freeze-thaw resistance test method for chimney products*

EN 14471, *Chimneys - System chimneys with plastic flue liners - Requirements and test methods*

EN 16497-1, *Chimneys - Concrete System Chimneys - Part 1: Non-balanced flue applications*

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