

STN	Samostatne stojace komíny Časť 1: Všeobecné požiadavky	STN EN 13084-1 73 4112
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Free-standing chimneys - Part 1: General requirements

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. 04/25

Obsahuje: EN 13084-1:2025

Oznámením tejto normy sa ruší
STN EN 13084-1 (73 4112) zo septembra 2007

140233

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2025
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii
v znení neskorších predpisov.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13084-1

January 2025

ICS 91.060.40

Supersedes EN 13084-1:2007

English Version

Free-standing chimneys - Part 1: General requirements

Cheminées autoportantes - Partie 1 : Exigences
générales

Freistehende Schornsteine - Teil 1: Allgemeine
Anforderungen

This European Standard was approved by CEN on 25 November 2024.

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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

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EN 13084-1:2025 (E)**European foreword**

This document (EN 13084-1:2025) has been prepared by Technical Committee CEN/TC 297 “Free-standing industrial chimneys”, the secretariat of which is held by AFNOR.

This document supersedes EN 13084-1:2007.

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of an identical text or by endorsement, at the latest by July 2025, and conflicting national standards shall be withdrawn at the latest by July 2025.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

In comparison with its previous edition EN 13084-1:2007, the current edition EN 13084-1:2024 includes the following:

- reorganization of terms and definitions;
- addition of the paragraph on connecting flue pipe;
- additional information on access systems;
- new informative Annex B “Calculation method for combined flue gases with different temperatures”.

This document is part 1 of a series of standards as listed below:

- EN 13084-1, *Free-standing chimneys — Part 1: General requirements*
- EN 13084-2, *Free-standing chimneys — Part 2: Concrete chimneys*
- EN 13084-4, *Free-standing chimneys — Part 4: Brick liners — Design and execution*
- EN 13084-5, *Free-standing chimneys — Part 5: Material for brick liners — Product specifications*
- EN 13084-6, *Free-standing chimneys — Part 6: Steel liners – Design and execution*
- EN 13084-7, *Free-standing chimneys — Part 7: Product specifications of cylindrical steel fabrications for use in single wall steel chimneys and steel liners*
- EN 13084-8, *Free-standing chimneys — Part 8: Design and execution of mast construction with satellite components*
- EN 13084-9, *Free-standing chimneys — Part 9: Lifetime management — Monitoring, inspection, maintenance, remedial and reporting; operations and actions required*

Additionally applies:

- EN 1993-3-2:2006, *Eurocode 3 — Design of steel structures — Part 3-2: Towers, masts and chimneys — Chimneys*

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 organisations 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 13084-1:2025 (E)**1 Scope**

This document deals with the general requirements and the basic performance criteria for the design and construction of all types of structurally independent chimneys including their liners.

This document also applies to chimneys connected to buildings when at least one of the following criteria is met:

- the distance between the lateral guides is more than 4 m;
- the free-standing height above the uppermost structural support attachment is more than 3 m;
- the free-standing height above the uppermost structural support attachment for chimneys with rectangular cross section is more than five times the smallest external dimension.

Structurally independent chimneys take into account in their design: operational conditions and other actions to verify mechanical resistance and stability and safety in use. Detailed requirements relating to specialized designs are given in the standards for concrete chimneys, steel chimneys and their liners, as well as masts construction with satellite components.

In other parts of the EN 13084 series, rules will be given where system chimney products in accordance with EN 1443 (and the relating product standards) are used in structurally independent chimneys.

This document does not cover the design and construction of connecting flue pipes.

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 1990, *Eurocode — Basis of structural and geotechnical design*

EN 1991-1-1, *Eurocode 1: Actions on structures — Part 1-1: General actions — Densities, self-weight, imposed loads for buildings*

EN 1991-1-4:2005, *Eurocode 1: Actions on structures — Part 1-4: General actions — Wind actions*

EN 1998-6, *Eurocode 8: Design of structures for earthquake resistance — Part 6: Towers, masts and chimneys*

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