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Free-standing chimneys - Part 6: Steel liners - Design and execution

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. 02/26

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EUROPEAN STANDARD

EN 13084-6

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English Version

Free-standing chimneys - Part 6: Steel liners - Design and execution

Cheminées autoportantes - Partie 6: Parois intérieures
en acier - Conception et mise en oeuvre

Freistehende Schornsteine - Teil 6: Innenrohre aus
Stahl - Bemessung und Ausführung

This European Standard was approved by CEN on 5 October 2025.

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COMITÉ EUROPÉEN DE NORMALISATION
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EN 13084-6:2025 (E)

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European foreword

This document (EN 13084-6:2025) has been prepared by Technical Committee CEN/TC 297 “Free-standing industrial chimneys”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by May 2026 and conflicting national standards shall be withdrawn at the latest by May 2026.

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 13084-6:2015.

EN 13084-6:2025 includes the following significant technical changes with respect to EN 13084-6:2015:

- reformulation of the scope;
- additions to the terms and definitions;
- revision and addition of 5.2 “Construction details”;
- revision and addition of Clause 6 “Structural design”;
- deletion of Annex A which was transferred to EN 13084-1:2025.

The EN 13084 series consists of the following parts:

- 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*

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.

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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 deals with special requirements and performance criteria for the design of lining systems made of steel for free standing chimneys. It specifies the requirements for cylindrical steel liners as stated in EN 13084-1.

This document covers the design of the following three basic types of liners located in a load bearing structure:

- a) base supported liner;
- b) sectional liner;
- c) top hung liner.

Additionally, this document applies to single wall chimneys regarding their contact with flue gases.

For simplicity, these various designs will generally be referred to herein as “liners”.

The mechanical requirement is not part of this document; for information, see EN 1993-3.

NOTE Liners built from prefabricated metal chimneys in accordance with EN 1856-1:2009 and EN 1856-2:2009 are installed as base supported liners with additional supports and guides as defined in this document.

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 1090-2, *Execution of steel structures and aluminium structures — Part 2: Technical requirements for steel structures*

EN 1856-1:2009, *Chimneys — Requirements for metal chimneys — Part 1: System chimney products*

EN 1856-2:2009, *Chimneys — Requirements for metal chimneys — Part 2: Metal flue liners and connecting flue pipes*

EN 1859:2009+A1:2013, *Chimneys — Metal chimneys — Test methods*

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

EN 1993-1-6, *Eurocode 3 — Design of steel structures — Part 1-6: Strength and stability of shell structures*

EN 1993-3,¹ *Eurocode 3 — Design of steel structures — Part 3: Towers, masts and chimneys*

EN 10028 (all parts), *Flat products made of steels for pressure purposes*

EN 10088 (all parts), *Stainless steels*

EN 10095, *Heat resisting steels and nickel alloys*

EN 13084-1:2025, *Free-standing chimneys — Part 1: General requirements*

EN 13084-7:2012, *Free-standing chimneys — Part 7: Product specifications of cylindrical steel fabrications for use in single wall steel chimneys and steel liners*

¹ Under preparation. Current stage: FprEN 1993-3:2025.

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EN 62305-1, *Protection against lightning — Part 1: General principles*

EN ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections (ISO 5817)*

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