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BS EN 13084-6:2015



BSI Standards Publication

Free-standing chimneys

Part 6: Steel liners — Design and execution

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This British Standard is the UK implementation of EN 13084-6:2015. It supersedes BS EN 13084-6:2004 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/506/14, Structural Chimneys and Flues.

A list of organizations represented on this committee can be obtained on request to its secretary.

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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 œuvre

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

This European Standard was approved by CEN on 20 September 2015.

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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 13084-6:2015) has been prepared by Technical Committee CEN/TC 297 "Free-standing industrial chimneys", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13084-6:2004.

This European Standard is part one of the package of standards listed below:

- EN 13084-1, *Free-standing industrial 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 1993-3-2, *Eurocode 3: Design of steel structures – Part 3-2: Towers, masts and chimneys – Chimneys.*

The main changes compared to the previous edition are:

- a) all normative references were updated;
- b) The reference in 6.1.3 was corrected to EN 1991-1-4:2005, 7.2.9.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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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 whose surface is in contact with flue gases.

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

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1443, *Chimneys — General requirements*

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

EN 1991-1-4:2005, *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 1993-3-2:2006, *Eurocode 3 — Design of steel structures — Part 3-2: Towers, masts and chimneys — 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 13084-1:2007, *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*

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