

KONSTRUKTIIVSELT ISESEISVAD KORSTNAD. OSA 9:
KASUTUSAEGNE HALDUS. JÄRELEVALVE, ÜLEVAATUS,
HOOLDUS, PARANDUS JA ARUANDLUS: NÕUTAVAD
TEGEVUSED JA MEETMED

Free-standing chimneys - Part 9: Lifetime management
- Monitoring, inspection, maintenance, remedial and
reporting; Operations and actions required

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13084-9:2022 sisaldab Euroopa standardi EN 13084-9:2022 ingliskeelset teksti.	This Estonian standard EVS-EN 13084-9:2022 consists of the English text of the European standard EN 13084-9:2022.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.10.2022.	Date of Availability of the European standard is 26.10.2022.
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ICS 91.060.40

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English Version

**Free-standing chimneys - Part 9: Lifetime management -
Monitoring, inspection, maintenance, remedial and
reporting; Operations and actions required**

Cheminées autoportantes - Partie 9 : Gestion du cycle
de vie - Surveillance, inspection, maintenance, mesures
correctives et établissement de rapports ; opérations et
actions requises

Freistehende Industrieschornsteine - Teil 9:
Lebensdauermanagement - Überwachung, Inspektion,
Wartung, Sanierungsmaßnahmen und Dokumentation;
Notwendige Maßnahmen und Verfahren

This European Standard was approved by CEN on 26 September 2022.

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Contents

Page

European foreword	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions.....	6
4 Maintenance and inspection.....	7
5 Repair works	22
6 Decommissioning and demolition.....	24
Annex A (informative) Guidelines for provisions concerning the use of work equipment provided for temporary work at a height	28
A.1 General.....	28
A.2 Specific provisions regarding the use of ladders	29
A.3 Specific provisions regarding the use of scaffolding.....	29
A.4 Specific provisions regarding the use of rope access and positioning techniques	30
A.5 What to consider when planning work at height.....	31
Annex B (informative) Examples of damages with associated level of criticality	32
Bibliography	34

European foreword

This document (EN 13084-9:2022) 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 April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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 is Part 9 in a series of standards and as such is not a stand-alone document. The requirements in Parts 1 to 8 of this series are integral to Part 9.

EN 13084, *Free-standing chimneys* consists of the following parts:

- *Part 1: General requirements*
- *Part 2: Concrete chimneys*
- *Part 4: Brick liners — Design and execution*
- *Part 5: Material for brick liners — Product specifications*
- *Part 6: Steel liners — Design and execution*
- *Part 7: Product specifications of cylindrical steel fabrications for use in single wall steel chimneys and steel liners*
- *Part 8: Design and execution of mast construction with satellite components*
- *Part 9: Life-Time Management — Monitoring, Inspection, Maintenance, Remedial and Reporting; operations and actions*

The following documents additionally apply:

- EN 1993-3-1, *Eurocode 3 — Design of steel structures — Part 3-1: Towers, masts and chimneys — Towers and masts*
- EN 1993-3-2, *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.

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Introduction

EN 1990 indicates as a principle that to ensure adequate durability of the structure, several factors should be considered including the expected maintenance during the period of project use.

The same standard also states as a principle that proper inspections and maintenance according to the procedures specified in the project documentation should be stated to ensure the required level of reliability.

EN 13084-1 requires in Clause 7 that the chimneys be checked at regular intervals by an expert. The interval should not exceed two years between any checks. A written report should include recommendations for maintenance and repair.

When planning new-build or refurbishment projects, architects, designers, manufacturers and contractors have duties under European Directive 92/57/EEC 24th June 1992 on the implementation of minimum safety and health requirements at constructions sites), to consider the need for work to be carried out at height over the lifespan of a building, e.g. to clean, maintain and repair it, and they should design out the need to work at height if possible.

It is therefore necessary to specify the various operations to be carried out both in inspection and maintenance to clarify the various points of intervention to prolong the duration of use and reliability of the structure. This document describes these operations according to the summary of contents on page 2.

1 Scope

This document covers the general requirements and the basic criteria for lifetime management of all kinds of free-standing chimneys, comprising monitoring, inspection, maintenance, repair, reporting, and necessary actions and procedures. This document applies to any windshield, single stack, tower, mast and liner covered by the EN 13084 series.

The Lifetime management considers the original structural and operating design of the structurally independent chimneys under operational conditions and other actions to verify that mechanical resistance and stability and safety in use are continued at the designed for level as expected and/or adapted to changes in the operational requirements of the structure and/or its environment.

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

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 365, *Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging*

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

EN 1990, *Eurocode — Basis of structural design*

EN 1993-1-11, *Eurocode 3 — Design of steel structures — Part 1-11: Design of structures with tension components*

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

EN 62305 (all parts), *Protection against lightning*