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Korstnad. Koostisosad. Betoonist välisseina elemendid
Chimneys - Components - Concrete outer wall elements

EESTI STANDARDI EESSÕNA

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ICS 91.060.40

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EUROPEAN STANDARD

EN 12446

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2011

ICS 91.060.40

Supersedes EN 12446:2003

English Version

Chimneys - Components - Concrete outer wall elements

Conduits de fumée - Composants - Enveloppes externes
en béton

Abgasanlagen - Bauteile - Außenschalen aus Beton

This European Standard was approved by CEN on 25 May 2011.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 12446:2011) 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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by March 2013.

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 12446:2003. The main modifications to EN 12446:2003 are:

- a) a revised table of heat flow values for thermal performance testing which now includes values for high pressure applications, e.g. diesel generators,
- b) a test method for the evaluation of Flexural strength under wind loading (clause 8.7 and Test methods clause A.2),
- c) a requirement to evaluate the gas tightness of passages used for combustion air (clause 8.8 and Test methods clause A.3),
- d) a requirement relating to the Resistance to fire from an external source (clause 8.9),
- e) a requirement relating to the Release of dangerous substances (clause 8.10).

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s) 89/106/EEC, see informative Annex ZA, which is an integral part of this document.

This standard is one of a series of co-ordinated standards dealing with specification, design, testing and installation of chimneys, both single and multi wall.

The co-ordinated package of standards is further divided by material of construction and this European Standard is one of a series of specifications and execution documents dealing with design and installation of concrete chimney products and systems.

The standards in this series for concrete chimney products and systems are:

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

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

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

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the material, dimensional and performance requirements for factory made precast concrete outer wall elements for chimneys including outer wall fittings.

This European Standard covers elements having up to four passages designated to accommodate a combination of flue liners and/or ventilation passages.

This European Standard also relates to storey-height and reinforced outer wall elements.

This European Standard does not apply to structurally independent (freestanding or self-supporting) chimneys constructed using these outer wall elements.

NOTE Any reference to the term "outer wall element" implies both the outer wall elements and their fittings, except where otherwise indicated.

2 Normative references

The following referenced documents are indispensable for the application 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 1443:2003, *Chimneys — General requirements*

EN 1857:2010, *Chimneys — Components — Concrete flue liners*

EN 1858:2008, *Chimneys — Components — Concrete flue blocks*

EN 10088-2:2005, *Stainless steels — Part 2: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

EN 10218-2, *Steel wire and wire products — General — Part 2: Wire dimensions and tolerances*

EN 14297:2004, *Chimneys — Freeze-thaw resistance test method for chimney products*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1443:2003 and the following apply.

3.1

outer wall fitting

outer wall element such as access openings, offsets

3.2

concrete

material formed by mixing cement, coarse and fine aggregate and water and with or without the incorporation of admixtures, additions, glass fibres or steel fibres, which develops its properties by hydration of the cement

[EN 206-1:2000]