



SLOVENSKI STANDARD

SIST EN 13063-3:2008

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Chimneys — System chimneys with clay/ceramic flue liners — Part 3: Requirements and test methods for air flue system chimneys

Abgasanlagen - System-Abgasanlagen mit Keramik-Innenrohren - Teil 3: Anforderungen und Prüfungen für Luft-Abgasleitungen

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Conduits de fumées - Conduits (systemes avec conduit intérieur en terre cuite/céramique - Partie 3 : Exigences et méthodes d'essai pour conduits-systemes a brassage d'air

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English Version

Chimneys - System chimneys with clay/ceramic flue liners - Part 3: Requirements and test methods for air flue system chimneys

Conduits de fumées - Conduits-systèmes avec conduit intérieur en terre cuite/céramique - Partie 3 : Exigences et méthodes d'essai pour conduits-systèmes à brassage d'air

Abgasanlagen - System-Abgasanlagen mit Keramik-Innenrohren - Teil 3: Anforderungen und Prüfungen für Luft-Abgasleitungen

This European Standard was approved by CEN on 9 June 2007.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 13063-3:2007) has been prepared by Technical Committee CEN/TC 166 "Chimneys", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by January 2008, and conflicting national standards shall be withdrawn at the latest by April 2009.

This standard is part 3 of a series of standards for system chimneys with clay/ceramic flue liners. Part 1 is for soot fire resistant system chimneys and part 2 is for system chimneys working under wet conditions.

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 89/106.

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

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, 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 United Kingdom.

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1 Scope

This product standard specifies the requirements and test methods for dry (designated D) and/or wet (designated W) air flue system chimneys, including terminals in which the products of combustion are conveyed to the atmosphere through clay/ceramic flue liners and combustion air is conveyed to suitable room-sealed appliances through an air duct or an air gap.

It also specifies the requirements for marking, manufacturer's instructions, product information and evaluation of conformity.

This standard does not apply to structurally independent (free standing or self supporting) system chimneys.

An air flue system chimney is made of the following components where appropriate:

- clay/ceramic flue liners;
- insulation layer;
- outer walls;
- mortar for jointing flue liners;
- acid resistant mortar or elastomeric sealant for jointing flue liners;
- mortar for jointing outer walls;
- terminal;
- chimney base;
- pressure equalising opening;
- air duct;
- air gap;
- cladding;
- opening section;
- cleaning and inspection door;
- distance piece;
- reinforcement.

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The air flue system chimney covers a combination of compatible chimney components obtained or specified from one manufacturing source, with product responsibility for the whole chimney.

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 1457:1999, *Chimneys — Clay/Ceramic Flue Liners — Requirements and test methods*

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

EN 13063-1:2005, *Chimneys — System chimneys with clay/ceramic flue liners — Part 1: Requirements and test methods for sootfire resistance*

EN 13063-2: 2005, *Chimneys — System chimneys with clay/ceramic flue liners — Part 2: Requirements and test methods under wet conditions*

EN 13069, *Chimneys — Clay/ceramic outer walls for system chimneys — Requirements and test methods*

EN 13162, *Thermal insulation products for buildings — Factory made mineral wool (MW) products — Specification*

EN 13216-1:2004, *Chimneys — Test methods for system chimneys — Part 1: General test methods.*

EN 13384-1, *Chimneys — Thermal and fluid dynamic calculation methods Part 1: Chimneys serving one appliance*

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

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3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1443:2003, EN 13063-1:2005, EN 13063-2:2005 and the following apply.

3.1

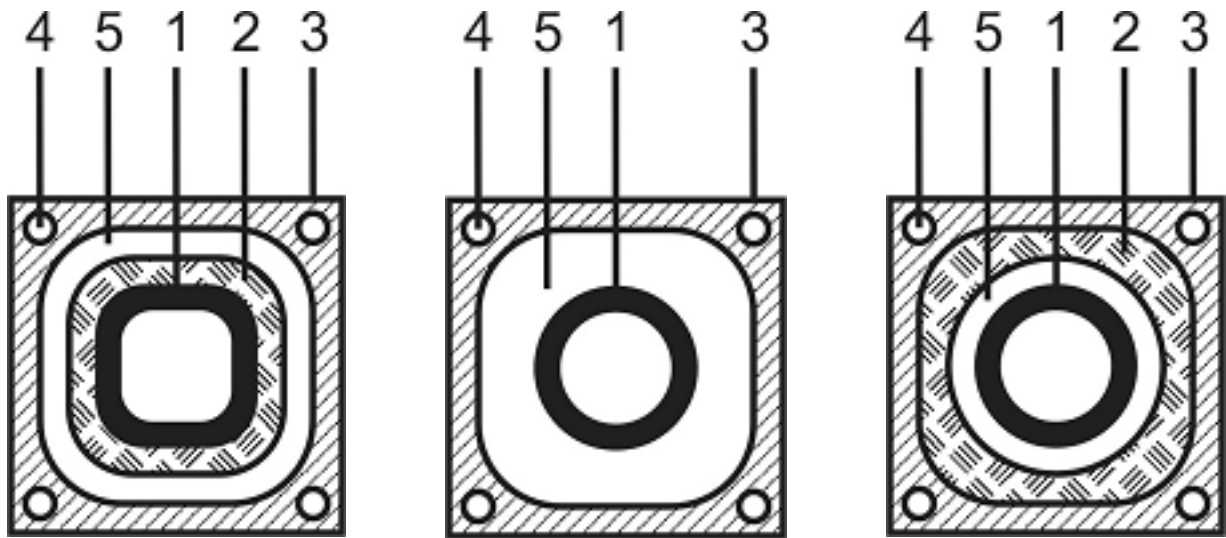
air flue – system chimney

chimney with an air duct (combustion air), flue duct (flue gas) and terminal for room-sealed appliances

3.2

concentric air flue – system chimney

chimney with the air duct concentric around the flue

**Key**

- 1 Flue duct
- 2 Insulation layer
- 3 Outer wall
- 4 Cavities for structural reinforcement
- 5 Air gap

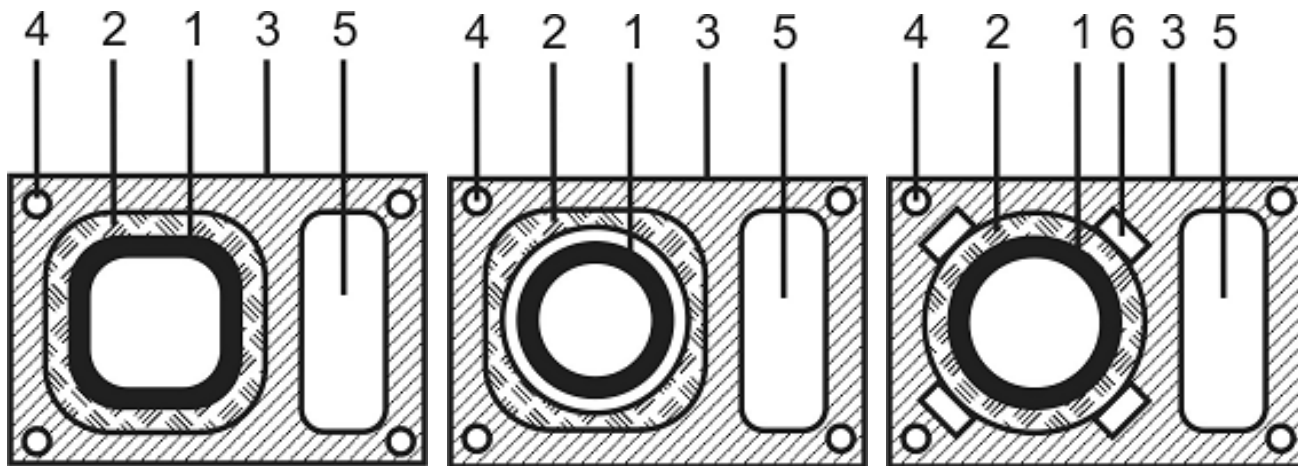
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Figure 1 — Examples of cross sections of concentric air flue system chimneys

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3.3
side-by-side air flue system chimney
 chimney with the air duct side-by-side to the flue



Key

- 1 Flue duct
- 2 Insulation layer or air gap
- 3 Outer wall
- 4 Cavities for structural reinforcement
- 5 Air duct
- 6 Back ventilation

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Figure 2 — Examples of cross sections of side-by-side air flue system chimneys

3.4
terminal
 element consisting of an air inlet and a flue outlet which is situated at the top of the air flue–system chimney

3.5
pressure-equalising opening
 opening that directly connects the air duct/air gap with the flue which is situated at the base of the air flue–system chimney

3.6
air duct/air gap
 part of the air flue–system chimney which conveys combustion air to room-sealed appliances

3.7
recirculation percentage
 ratio between the amount of flue gases leaking through the flue opening into the air duct opening of the terminal and the total amount of flue gases produced

3.8
wind pressure angle
 angle related to horizontal at which the wind impinges upon the air/flue terminal

3.9**wind effect pressure**

additional pressure difference between the inlet and the outlet of the terminal due to wind

4 Shapes, dimensions and tolerances**4.1 Air-flue system chimney**

The requirements for shapes, dimensions and tolerances shall be as given in EN 13063-1:2005, clause 4.

4.2 Terminals

When terminals are supplied with the air-flue system chimneys, the dimensions and tolerances of the terminals shall be declared by the manufacturer.

4.3 Pressure-equalising openings

Where pressure-equalising openings are supplied with the air-flue system chimneys, dimensions and tolerances of the pressure-equalising openings shall be declared by the manufacturer.

4.4 Air duct dimensions

Dimensions and tolerances shall be declared by the manufacturer.

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5 Requirements

[SIST EN 13063-3:2008](https://standards.iteh.ai/catalog/standards/sist/5cceaaccf-d986-4a8d-8bc0-aa80726c542f/sist-en-13063-3-2008)

5.1 General

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The material requirements of this standard are covered by the requirements given in EN 13063-1 and EN 13063-2.

5.2 Material requirements for air-flue system chimneys and terminals

All air flue system chimneys designated D, excluding terminals, shall be in accordance with the material requirements of EN 13063-1:2005, clause 5.

Concentric air flue system chimneys designated W, excluding terminals, shall be in accordance with the material requirements of EN 13063-2:2005, clause 5. In addition the flue liner shall have a water vapour resistance less than or equal to 10 (g/h m²) measured according to EN 1457:1999, 16.13.

Side-by-side air flue system chimneys designated W shall be in accordance with the material requirements of EN 13063-2:2005, clause 5.

Material requirements for terminals shall be specified according to the appropriate European standard or, in the absence of European standards, according to the manufacturer's specification.

5.3 Minimum compressive strength for a pressure-equalising opening section

The minimum compressive strength for a pressure-equalising opening section shall be in accordance with the requirements for opening sections of EN 13063-1:2005, 5.1.3 when testing in accordance with Annex A.

NOTE The limiting factor of the maximum height of system chimneys is the compressive strength of the opening section or pressure-equalising opening section (inner liner or outer wall).