

საქართველოს ეროვნული სტანდარტი

კვამლისა და სითბოს საკონტროლო სისტემები.
ნაწილი 1: კვამლის გზაუბების სპეციფიკაცია

საქართველოს სტანდარტების, ტექნიკური რეგლამენტების
და მეტროლოგიის ეროვნული სააგენტო
თბილისი

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტებისა და ტექნიკური რეგლამენტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედო საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს 2009 წლის 10 სექტემბრის №35 “ს” განკარგულებით

3 მიღებულია გარეკანის მეთოდით სტანდარტიზაციის საერთაშორისო ორგანიზაციის სტანდარტი ISO 96 12101 : 2005 „კვამლისა და სითბოს საკონტროლო სისტემები. ნაწილი 1: კვამლის ზღუდეების სპეციფიკაცია”

4 პირველად

5 რეგისტრირებულია საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2009 წლის 4 სექტემბერი №268-1.3-3027

წინამდებარე სტანდარტის სრული ან ნაწილობრივი აღწარმოება, გირაჟირება და გავრცელება საქართველოს სტანდარტების, ტექნიკური რეგლამენტების და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე არ დაიშვება

English Version

Smoke and heat control systems - Part 1: Specification for smoke barriers

Systèmes pour le contrôle des fumées et de la chaleur -
Partie 1: Spécifications relatives aux écrans de
cantonnement de fumée

Rauch- und Wärmefreihaltung - Teil 1: Bestimmungen für
Rauchschürzen

This European Standard was approved by CEN on 16 January 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

page

0	Introduction.....	6
0.1	General	6
0.2	Function of smoke barriers	6
0.3	Applications of smoke barriers	7
0.4	Types of smoke barrier	7
1	Scope.....	8
2	Normative references	8
3	Terms, definitions and symbols	8
3.1	General terms and definitions	8
3.2	Symbols	10
4	Product requirements	11
4.1	General	11
4.2	Barrier types	11
4.3	Auxiliary power supply	12
4.4	Smoke (fire effluent) leakage	12
4.5	Reliability	13
4.6	Response time	13
5	Performance requirements and classifications	13
5.1	General	13
5.2	Temperature/time classification	13
5.3	Reliability and durability of smoke barriers	14
5.4	Response time of active smoke barriers	14
5.5	Smoke leakage (containment efficiency).....	15
6	Evaluation of conformity.....	22
6.1	General	22
6.2	Initial type testing	23
6.3	Factory product control (FPC).....	24
7	Installation	26
8	Maintenance.....	27
9	Marking and labelling	27
Annex A	(normative) General testing requirements	29
A.1	Principle	29
A.2	Test sequence for initial type testing.....	29
A.3	Test report.....	29
Annex B	(normative) Reliability and response time tests	31
B.1	Test method for the reliability and the response time of the product and the durability of materials	31
B.2	Test specimen.....	31
B.3	Procedure.....	31
B.4	Test report.....	32
Annex C	(normative) Permeability of materials to smoke	33
C.1	Materials: Impermeable.....	33
C.2	Materials: Permeable (permitting limited passage of smoke).....	33
C.3	Test procedure.....	33
C.4	Test report.....	33
Annex D	(normative) Temperature/time resistance tests	34

D.1	Test equipment	34
D.2	Test specimen requirements	34
D.3	Installation of test specimen into the support frame	36
D.4	Test procedure.....	37
D.5	Measurements and observations	38
D.6	Test report.....	39
Annex E	(informative) Deflection of smoke barriers	40
E.1	General	40
E.2	Principle	42
E.3	Barriers not reaching the floor	44
E.4	Barriers closing an opening	45
E.5	Smoke leakage through gaps in barriers.....	46
Annex ZA	(informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive.....	47
ZA.0	Scope of this annex.....	47
ZA.1	Relationship between EU Directive and this European Standard.....	47
ZA.2	Procedure for the attestation of conformity of smoke barriers	48
ZA.3	CE marking.....	48
ZA.4	Certificate and declaration of conformity.....	49

Foreword

This European Standard (EN 12101-1:2005) has been prepared by Technical Committee CEN/TC 191 "Fixed firefighting systems", the secretariat of which is held by BSI.

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 February 2006, and conflicting national standards shall be withdrawn at the latest by August 2008.

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/EEC.

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

This European Standard is one part of the European Standard EN 12101, which has the general title "Smoke and heat control systems" and consists of the following separate parts:

- Part 1: Specification for smoke barriers.
- Part 2: Specification for natural smoke and heat exhaust ventilators.
- Part 3: Specification for powered smoke and heat exhaust ventilators.
- Part 4: Fire and smoke control installations — Kits.
- Part 5: Guidelines on functional recommendations and calculation methods for smoke and heat exhaust ventilation systems (published as CR 12101-5)
- Part 6: Specification for pressure differential systems — Kits.
- Part 7: Smoke control ducts.
- Part 8: Specification for smoke control dampers.
- Part 9: Control panels.
- Part 10: Specification for power supplies.

EN 12101 is included in a series of European Standards planned also to cover:

- a) CO₂ systems (EN 12094 & EN ISO 14520);
- b) sprinkler systems (EN 12259);
- c) powder systems (EN 12416);
- d) explosion protection systems (EN 26184);
- e) foam systems (EN 13565);
- f) hose reel systems (EN 671);

g) water spray systems.

Annexes A to D are normative.

Annex E is informative.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.