

Partial amendment to the original and first and second revision to the answer to mandate M/109 dealing with the following clauses B.1.1.1, B1.1.2, D.2.1, D.2.2, D.2.3, D.2.4, D.2.5, D.2.6, and D.2.7

Technical Committee TC 191

Date: 2014-01-14

Documents	Reference Number	Date of issue
Mandate number	M109	1994-02-28
Original answer to the Mandate	CEN letter	1998-06-08
Commission's acceptance	GE/si D(98)	1998-07-30
1 st revision of the answer to the mandate	CEN/TC191/N584	2000-05-11
Commission's acceptance	ENTR/G5 GE/si D860232	2000-06-27
2 nd amendment of the answer to the mandate	CENTC191/N230	2003-07-02
3 rd amendment of the answer to the mandate	CENTC191/N977	2008-05-01
Commission's acceptance		2007-08-20
4 th amendment of the answer to the mandate	This document N 1212 (Replaces N1200 Rev)	2014-01-14
Commission's acceptance		

Clause of the original answer as amended	Reason for the change (short description)	Supporting information (if relevant)
B.1.1.1.1	It is proposed to re-number the point as follows: B.1.1.1	Editorial mistake
B.1.1.1 (ii)	It is proposed to amend the Scope as follows: This European Standard specifies characteristics and methods of test for the construction and performance of fire hose	

	<p>reel systems with semi-rigid hose.</p> <p>Furthermore, it provides also for a clause on assessment and verification of constancy of performance and marking of these products. Product characteristics may apply in general for other applications, for example in marine applications or in aggressive environments, but additional characteristics may be necessary in such cases.”</p> <p>This standard is applicable to both manual and automatic fire hose reels for installation with and without cabinets.</p>	
B.1.1.1 (iii)	<p>It is proposed to modify the intended use as follows:</p> <p>For fixed installations in construction works, permanently connected to a water supply, for use by the occupants as the means to control and extinguish a fire nearby.</p>	
B.1.1.1(iv)	<p>Proxy characteristics are proposed for:</p> <p>Distribution of extinguishing media</p> <ul style="list-style-type: none"> - Minimum flow rate - Effective throw range - Spray discharge <p>Operational reliability</p> <ul style="list-style-type: none"> — Reel, Construction — Reel, Rotating — Reel, Swinging — Reel, Resistance to impact — Reel, Resistance to load — Hose, General — Shut-off nozzle, General — Shut-off nozzle, Resistance to impact — Shut-off nozzle, Operating torque — Inlet stop valve, General — Inlet stop valve, Manual inlet stop valve — Inlet stop valve, Automatic inlet stop valve — Hydraulic properties, Resistance to internal pressure — Hydraulic properties, Strength <p>Ability to pull out the hose</p> <ul style="list-style-type: none"> — Reel, Unwinding load — Reel, Dynamic breaking 	Missing in previous amendments

	— Hose, Maximum length	
B.1.1.1 (v)	It is proposed to modify the point as follows: (v) Durability aspects: None	
B.1.1.1 (vi)	It is proposed to add the following (vi) Other aspects The harmonised standard will also contain: - a reference to the Commission’s Decision on attestation of conformity; - clauses on assessment and verification of constancy of performance; - guidance on the characteristics to be stated in the labelling accompanying the CE marking and on the way of expressing the determined values of these characteristics.	Missing in previous amendments
B.1.1.2	It is proposed to change the wording to NONE	All supporting standards are available
B.1.1.3	It is proposed to add the following wording: None	Missing in previous amendments
B.1.1.2.1, (ii)	It is Proposed to modify the scope as follows This specifies characteristics and methods of test for the construction and performance of fire hose systems with lay-flat hose permanently connected to a water supply. Furthermore, it provides also for characteristics on assessment and verification of constancy of performance and marking of these products. Product characteristics may apply in general for other applications, for example in marine applications or in aggressive environments, but additional characteristics may be necessary in such cases.	
B.1.1.2.1, (iii)	It is proposed to modify the intended use as follows: Fixed installations in construction works to provide the occupants the means to control and extinguish a fire nearby.	
B.1.1.2.1, (iv)	It is proposed to modify the list of essential characteristics as follows: -Distribution of extinguishing media — Hose bore — Minimum flow rate	

	<ul style="list-style-type: none"> — Effective throw range — Spray discharge <p>Operational reliability</p> <ul style="list-style-type: none"> — Hose, General — Shut-off nozzle, General — Shut-off nozzle, Resistance to impact — Shut-off nozzle, Operating torque — Inlet stop valve — Hydraulic properties, resistance to internal pressure — Hydraulic properties, security of couplings <p>Ability to pull out the hose</p> <ul style="list-style-type: none"> — Type 1 Reel — Type 1 and 3 supports swinging 	
B.1.1.2.1 (v)	<p>It is proposed to modify the point as follows:</p> <p>(v) Durability aspects:</p> <p>None</p>	
B.1.1.2.2	<p>It is proposed to change the wording to</p> <p>None</p>	All supporting standards are available
B.1.1.2.3	<p>It is proposed to add the following wording:</p> <p>None</p>	Missing in previous amendments
B.1.1.4	<p>It is proposed to add the following</p> <p>B.1.1.4 Other aspects</p> <p>The harmonised standard will also contain:</p> <ul style="list-style-type: none"> - a reference to the Commission’s Decision on attestation of conformity; - clauses on assessment and verification of constancy of performance; - guidance on the characteristics to be stated in the labelling accompanying the CE marking and on the way of expressing the determined values of these characteristics. 	Missing in previous amendments
D.2.2	<p>It is proposed to renumber the clause as follows:</p> <p>D.2.1</p>	Wrong numbering n the original answer
D.2.1.1	<p>It is proposed to renumber the clause as follows:</p> <p>D.2.1.1</p>	Wrong numbering n the original answer
D.2.1.1 (ii)	<p>It is proposed to modify the scope as follows:</p> <p>This European Standard specifies characteristics, and test/assessment</p>	

	<p>methods and compliance criteria of the test results for smoke barriers which comprise the barrier itself, with or without associated activation and drive devices. It does not cover barriers made of part of the building's structure.</p>	
D.2.1.1 (iii)	<p>It is proposed to modify the intended use as follows: To be installed in smoke control systems in construction works.</p>	
D.2.1.1 (iv)	<p>It is proposed to modify the list of essential characteristics as follows:</p> <p>Fire resistance</p> <ul style="list-style-type: none"> - stability duration under constant temperature (D) - stability duration under the standard time-temperature curve (DH) - Smoke leakage (S); <p>Nominal activation condition sensitivity</p> <ul style="list-style-type: none"> - initiation device (Active fire barriers) immediate response - Closing mechanisms <p>Response delay (response time)</p> <ul style="list-style-type: none"> - reliability - gravity fail-safe <p>Operational reliability</p> <ul style="list-style-type: none"> - cycle tests <p>Deployment safety</p> <ul style="list-style-type: none"> - Deployment speed 	
D.2.1.1 (v)	<p>It is proposed to modify durability as follows: The durability for automatic smoke barriers is considered to be fulfilled by having carrying out Response delay (response time) Operational reliability and Deployment safety. Static barriers are not considered to be subject to detrimental aspects affecting the essential characteristics.</p>	Missing in the original answer
D2.2.1 (vi)	<p>It is proposed to add the following point: (vi) Other aspects This harmonized product standard will also contain:</p> <ul style="list-style-type: none"> - reference to the Commission decision(s) on attestation of conformity, 	Missing in the first revised answer to the mandate

	<ul style="list-style-type: none"> - clauses on assessment and verification of constancy of performance - guidance on the characteristics to be stated in the labelling accompanying the CE marking. 	
D.2.1.2	It is proposed to modify the point as follows: NONE	
D.2.1.3	It is proposed to modify the point as follows: NONE	
D.2.2.1	It is proposed to modify the heading as follows: D.2.2.1 Harmonized product standard: EN 12101-8	Editorial mistake in previous version
D.2.2.1 (ii)	<p>It is proposed to modify the scope as follows</p> <p>This European Standard applies to smoke control dampers. This standard specifies product characteristics and gives reference to the test/assessment methods and compliance criteria of the test results test methods defined for smoke control dampers</p> <p>Furthermore, provision on marking and information on of these products are also given in informative annexes.</p> <p>This European Standard distinguish between two categories of smoke control dampers, i.e. single compartment smoke control dampers and multi-compartment fire resisting smoke control dampers.</p> <p>This standard does not consider in detail the detrimental and/or corrosive effects that may be caused by process chemicals present in the atmosphere, which are drawn through the system intentionally or inadvertently.</p>	Clarification of scope
D.2.2.1 (iii)	<p>It is proposed to modify the intended use as follows:</p> <p>Smoke control dampers that are to be used as part of a pressure differential system or smoke and heat control system. in construction works,</p>	Clarification of intended use
D.2.2.1 (iv)	<p>It is proposed to modify the list of the essential characteristics as follows</p> <p>Nominal activation conditions/sensitivity.:</p> <ul style="list-style-type: none"> - Time to close after indication of alarm <p>Response delay (response time).</p>	Missing in previous amendments

	<ul style="list-style-type: none"> - Time to close after indication of alarm <p>Operational reliability.</p> <ul style="list-style-type: none"> - Cycling <p>Resistance to fire:</p> <ul style="list-style-type: none"> - Integrity/insulation (EI); - integrity (E) (for multi-compartment) - integrity (E₃₀₀ – E₆₀₀) (for single-compartment) - Smoke leakage (S); - Mechanical stability (under E) - Maintenance of the cross section (under E) 	The classification will be completed by the suffixes indicated in the EC Decision 2003/629/EC for single and multi-compartment
2.2.1 (v)	<p>It is proposed to modify the clause as follows:</p> <p>Durability of operational reliability:</p> <ul style="list-style-type: none"> - Open and closing cycle tests. 	Missing in previous amendments
D2.2.1 (vi)	<p>It is proposed to add the following point:</p> <p>(vi) Other aspects</p> <p>This harmonized product standard will also contain:</p> <ul style="list-style-type: none"> - references to other directives and compliance conditions applying to the product, - reference to the Commission decision(s) on attestation of conformity, - clauses on assessment and verification of constancy of performance - guidance on the characteristics to be stated in the labelling accompanying the CE marking. 	Missing in previous amendments
D2.2.2	<p>It is proposed the point to modify the point as follows:</p> <p>NONE</p>	All the test methods are available.
D2.2.3	<p>The following additional information has been added</p> <p>NONE</p>	Missing in previous amendments
D.2.3.1	<p>It is proposed to modify the heading as follows:</p> <p>D.2.3.1 Harmonized product standard: EN12101-7</p>	Missing in previous amendments
D.2.3.1 (i)	<p>It is proposed to modify the title as follows:</p> <p>Smoke and heat control systems – Part 7: Smoke control duct sections</p>	Title modified to differentiate from other ducts

<p>D.2.3.1 (ii)</p>	<p>It is proposed to modify the scope as follows</p> <p>This standard specifies product characteristics and gives reference to the test methods/assessments and gives test results and compliance criteria of the test results defined for smoke control duct sections.</p> <p>Furthermore, information on installation and maintenance of these products are also given in Informative annexes</p> <p>This standard does not consider in detail the detrimental and/or corrosive effects that may be caused by process chemicals present in the atmosphere, which are drawn through the system intentionally or inadvertently.</p> <p>Duct sections for use other than in smoke and heat exhaust/control systems are not covered by this standard.</p>	<p>Clarification of scope</p>
<p>D.2.3.1 (iii)</p>	<p>It is proposed to modify the intended use as follows:</p> <p>Smoke control duct sections that are to be used as part of a pressure differential system or smoke and heat exhaust system in construction works.</p>	<p>Clarification of intended use</p>
<p>D.2.3.1 (iv)</p>	<p>It is proposed to modify the list of essential characteristics as follows:</p> <p>Resistance to fire:</p> <ul style="list-style-type: none"> - Integrity (E); - Insulation (I); - Smoke leakage (S); - Mechanical stability (under E); - Maintenance of cross section (under E).. 	<p>Missing in previous amendments</p>
<p>2.3.1 (v)</p>	<p>It is proposed to modify the list of essential characteristics as follows:</p> <p>Durability:</p> <p>There are no known aspects affecting the durability of the resistance to fire.</p>	<p>Missing in previous amendments</p>
<p>2.3.1 (vi)</p>	<p>It is proposed to add the following clause:</p> <p>(vi) Other aspects</p> <p>This harmonized product standard will also contain:</p> <ul style="list-style-type: none"> - a reference to the Commission decision(s) on attestation of conformity, - clauses on assessment and verification of 	<p>Missing in previous amendments</p>

	constancy of performance, - guidance on the characteristics to be stated in the labelling accompanying the CE marking.	
D.2.3.2	It is proposed to modify the following point: NONE	All the test methods are available
D.2.3.3	It is proposed to modify the following point: NONE	Missing in previous amendments
D.2.4.1 (i)	It is proposed to modify the title as follows: Smoke and heat control systems – Part 3: Specification for powered smoke and heat control ventilators (Fans)	The word “control” is used instead of the word “exhaust” both functions of controlling and exhausting smoke and heat are covered.
D.2.4.1 (ii)	It is proposed to modify the title as follows: This European Standard specifies the product characteristics of powered smoke and heat control ventilators (fans) put. It provides test and assessment methods of the product characteristics and the compliance criteria of test and assessment results. This European Standard applies to the following: a) fans for smoke and heat control ventilation; b) impulse/jet fans for smoke and heat control ventilation;	Clarification of scope to better reflect the market situation
D.2.4.1 (iii)	It is proposed to modify the intended use as follows: To be installed as part of a powered smoke and heat control ventilation system in construction works.	Clarification of intended use
D.2.4.1 (iv)	it is proposed to modify the list of essential characteristics as follows: Response delay (response time). - opening under wind, snow load within a given time Operational reliability. - application categories - motor rating Effectiveness of smoke/hot gas extraction - gas flow and pressure maintenance during	Missing in previous amendments

	<p>smoke and heat extraction test</p> <p>Resistance to fire</p> <ul style="list-style-type: none"> - Functionality <p>Ability to open under environmental conditions.</p> <ul style="list-style-type: none"> - opening under wind, snow load within a given time. 	
D.2.4.1 (v)	<p>It is proposed to modify the text as follows:</p> <p>Durability of operational reliability</p> <ul style="list-style-type: none"> - motor rating 	Missing in previous amendments
D.2.4.1 (vi)	<p>It is proposed to add the following clause:</p> <p>(vi) Other aspects</p> <p>This harmonized product standard will also contain:</p> <ul style="list-style-type: none"> - a reference to the Commission decision(s) on attestation of conformity, - clauses on assessment and verification of constancy of performance, - guidance on the characteristics to be stated in the labelling accompanying the CE marking. 	Missing in previous amendments
D.2.4.2	<p>It is proposed to modify the point as follows:</p> <p>NONE</p>	
D.2.5.1 (i)	<p>The following modification of the title is proposed:</p> <p>Smoke and heat control systems – Part 2: Natural smoke and heat exhaust ventilators</p>	Modification of the title is proposed in line with other parts of EN 12101
D.2.5.1 (ii)	<p>The following modification of the scope is proposed:</p> <p>“This European Standard applies to natural smoke and heat exhaust ventilators operating as part of smoke and heat exhaust systems.</p> <p>This standard specifies product characteristics and gives test methods and compliance criteria of the test results.</p>	Clarification of scope to better reflect the market situation
D.2.5.1 (iii)	<p>It is proposed to modify the intended use as follows:</p> <p>Natural smoke and heat exhaust ventilators intended to be installed in smoke and heat control systems in construction works.</p>	
D.2.5.1 (iv)	<p>1 - It is proposed to modify the list of essential characteristics as follows:</p>	

	<p>Nominal activation condition sensitivity</p> <ul style="list-style-type: none"> - initiation device - opening mechanism - inputs and outputs <p>Response delay (response time)</p> <ul style="list-style-type: none"> - reliability - opening under (snow, wind) load - low ambient temperature - opening under heat <p>Operational Reliability</p> <ul style="list-style-type: none"> - Reliability <p>Effectiveness of smoke/hot gas extraction</p> <ul style="list-style-type: none"> - aerodynamic free area <p>Performance parameters under fire conditions</p> <ul style="list-style-type: none"> - resistance to heat - mechanical stability - reaction to fire <p>2 - It is proposed to delete the following essential characteristics</p> <p>Fire resistance.</p> <ul style="list-style-type: none"> - Fire resistance – smoke leakage S - Fire resistance – mechanical stability <p>Aerodynamic free area</p> <p>3 - It is proposed to modify the characteristic "Ability to open under environmental conditions" into:</p> <p>Performance under environmental conditions:</p> <ul style="list-style-type: none"> - performance under load - low ambient temperature - stability under wind load <ul style="list-style-type: none"> - resistance to wind induced vibration - resistance to heat 	<p>These are not relevant to the resistance to fire classification of these products</p> <p>This is a proxy of the effectiveness</p> <p>the stability under external wind forces is not an ability to open</p>
--	---	--

<p>D.2.5.1 (v)</p>	<p>The following Durability assessments are proposed:</p> <p>Durability:</p> <ul style="list-style-type: none"> - of response delay (response time) <ul style="list-style-type: none"> - reliability - opening under (snow, wind) load - low ambient temperature - opening under heat - of operational reliability <ul style="list-style-type: none"> - reliability - of performance parameters under fire conditions 	<p>Missing in previous amendments</p>
<p>D.2.5.1 (vi)</p>	<p>It is proposed to add the following clause:</p> <p>(vi) Other aspects</p> <p>This harmonized product standard will also contain:</p> <ul style="list-style-type: none"> - a reference to the Commission decision(s) on attestation of conformity, - clauses on assessment and verification of constancy of performance, - guidance on the characteristics to be stated in the labelling accompanying the CE marking. 	<p>Missing in previous amendments</p>
<p>D2.5.2</p>	<p>It is proposed the point to modify the point as follows:</p> <p>NONE</p>	<p>All the test methods are available.</p>
<p>D2.5.3</p>	<p>The following additional information has been added</p> <p>NONE</p>	
<p>D.2.6.1</p>	<p>It is proposed to modify the heading as follows:</p> <p>D.2.6.1 Harmonized product standard: EN 12101-9</p>	<p>Missing in previous amendments</p>
<p>D.2.6.1 (i)</p>	<p>It is proposed to modify the title as follows:</p> <p>Smoke and heat control systems - Part 9: Control Equipment</p>	
<p>D.2.6.1 (ii)</p>	<p>It is proposed to modify the scope as follows:</p> <p>This European standard specifies product characteristics of control equipment operating as part of smoke and heat exhaust systems and gives test methods, assessment methods and compliance</p>	<p>The scope has been modified to better reflect the content of the standard</p>

	criteria of the test results.	
D.2.6.1 (iii)	It is proposed to modify the intended use as follows: Control equipment to be used for smoke and heat control systems in construction works.	
D.2.6.1 (iv)	<p>1 - It is proposed to modify the list of essential characteristics as follows:</p> <p>Response delay (response time):</p> <ul style="list-style-type: none"> - reception and processing of fire signals - reset from the fire condition - reception and processing of fault signals - reset of fault indications (if provided) - deadlock (if provided) - output of the fire alarm condition (if provided) <p>Performance parameters under fire conditions::</p> <ul style="list-style-type: none"> - control panel inputs and outputs - visual indication - audible indication (if provided) - operational delay (if provided) - output to systems other than SHCS (if provided) - co-incident detection (Type D, if provided) - dependency on more than one alarm signal (if provided) <p>2 – It is proposed to delete the following characteristic:</p> <p>Operational reliability</p>	
D.2.6.1.(v)	It is proposed to modify the clause as follows: Durability of the response time and the performance parameters under fire conditions - operation under cold conditions	Missing in previous amendments
	<ul style="list-style-type: none"> - operation under damp heat, steady state - operation under impact - operation under vibration, sinusoidal - endurance under damp heat, steady state - endurance under vibration, sinusoidal 	

	<ul style="list-style-type: none"> - operation under dry heat - endurance under SO₂ corrosion - endurance under salt spray - protection against water - protection against substance - operation under EMC 	
D.2.6.1.(vi)	<p>It is proposed to add the following text:</p> <p>(vi) Other aspects</p> <p>This harmonized product standard will also contain:</p> <ul style="list-style-type: none"> - a reference to the Commission decision(s) on attestation of conformity, - clauses on assessment and verification of constancy of performance - guidance on the characteristics to be stated in the labeling accompanying the CE marking. 	Missing in previous amendments
D.2.6.2	<p>It is proposed to modify the text as follows:</p> <p>NONE</p>	
D.2.6.3	<p>It is proposed to modify the text as follows:</p> <p>NONE</p>	
D.2.7.1	<p>It is proposed to modify the heading as follows:</p> <p>D.2.7.1 Harmonized product standard: EN 12101-10</p>	Missing in previous amendments
D.2.7.1 (i)	<p>It is proposed to modify the title as follows:</p> <p>Smoke and heat control systems – Part 10: Power supplies</p>	
D.2.7.1 (ii)	<p>It is proposed to modify the scope as follows:</p> <p>This European standard specifies product characteristics of power supplies operating as part of smoke and heat exhaust systems and gives test methods, assessment methods and compliance criteria of the test results.</p>	
D.2.7.1 (iii)	<p>It is proposed to modify the intended use as follows:</p> <p>Power supplies for smoke and heat control in construction works.</p>	To better reflect the market situation
D.2.7.1 (iv)	<p>1 - It is proposed to modify the list of essential characteristics as follows:</p>	

	<p>Operational reliability</p> <ul style="list-style-type: none"> - primary power sources - secondary power source (battery if provided) - secondary power source (generator if provided) - recognition and indication of faults - compressed gas supplies (compressors if provided) - mechanical design <p>Response time</p> <ul style="list-style-type: none"> - operation at the end of the maximum standby period - operation time of generators to respond - switching from one power source to the other causes <p>Performance parameters under fire conditions</p> <ul style="list-style-type: none"> - Power supplies inputs and outputs <p>2 – It is proposed to add the Response time as an essential characteristic</p>	
<p>D.2.7.1 (v)</p>	<p>Durability</p> <p>It is proposed to modify the clause as follows:</p> <p>Durability of the response time, operational reliability and the performance parameters under fire conditions</p> <ul style="list-style-type: none"> - operation under cold conditions - operation under damp heat, steady state - operation under impact - operation under vibration, sinusoidal - endurance under damp heat, steady state - endurance under vibration, sinusoidal - operation under dry heat - endurance under SO₂ corrosion - endurance under salt spray - protection against water - protection against substance - operation under EMC 	
<p>D.2.7.1 (vi)</p>	<p>It is proposed to add the following clause:</p> <p>(vi) Other aspects</p> <p>This harmonized product standard will also</p>	<p>Missing in previous amendments</p>

	contain: - a reference to the Commission decision(s) on attestation of conformity, - clauses on assessment and verification of constancy of performance, - guidance on the characteristics to be stated in the labelling accompanying the CE marking.	
D.2.7.2	It is proposed to modify the point as follows: NONE	
D.2.7.3	It is proposed to modify the point as follows: NONE	

The changes listed here above are detailed here below in the relevant clauses on basis of the template for the answer to the Mandate (Document CMF N032 rev.2 Suppl. to BTS1 N877).

B.1 FIXED SUPPRESSION AND EXTINGUISHING SYSTEMS –KITS

B.1.1 HOSE REEL SYSTEMS

B.1.1.1 Harmonised product standard EN 671-1

STATUS

Published

(i) Title: Fixed firefighting systems – Hose systems – Part 1: Hose reels with semi-rigid hose

(ii) Scope: This European Standard specifies characteristics and methods of test for the construction and performance of fire hose reel systems with semi-rigid hose. Furthermore, it provides also for a clause on assessment and verification of constancy of performance and marking of these products. Product characteristics may apply in general for other applications, for example in marine applications or in aggressive environments, but additional characteristics may be necessary in such cases.”

Product characteristics may apply in general for other applications, for example in marine applications or in aggressive environments, but additional requirements may be necessary in such cases.

This standard is applicable to both manual and automatic fire hose reels for installation with and without cabinets.

(iii) Intended use:

For fixed installations in construction works, permanently connected to a water supply, for use by the occupants as the means to control and extinguish a fire near by.

(iv) The essential characteristics according to the mandate which will be dealt with in the above standard will be:

Distribution of extinguishing media

- Minimum flow rate
- Effective throw range
- Spray discharge

Operational reliability

- Reel, Construction
- Reel, Rotating
- Reel, Swinging
- Reel, Resistance to impact
- Reel, Resistance to load
- Hose, General
- Shut-off nozzle, General
- Shut-off nozzle, Resistance to impact
- Shut-off nozzle, Operating torque
 - Inlet stop valve, General
- Inlet stop valve, Manual inlet stop valve
- Inlet stop valve, Automatic inlet stop valve
- Hydraulic properties, Resistance to internal pressure
- Hydraulic properties, Strength

Ability to pull out the hose

- Reel, Unwinding load
 - Reel, Dynamic breaking
- Hose, Maximum length

(v) Durability

NONE

(vi) Other aspects

The harmonised standard will also contain:

- a reference to the Commission's Decision on attestation of conformity;
- clauses on the assessment and verification of constancy of performance;
- guidance on the characteristics to be stated in the labelling accompanying the CE marking and on the way of expressing the determined values of these characteristics.

B.1.1.2 Supporting standards

NONE

B.1.1.3 Additional information, comments and remarks

NONE

B.1.1.2.1 Harmonised product standard: EN 671-2

STATUS

Published

(i) Title: Fixed firefighting systems — Hose systems — Part 2: Hose system with lay-flat hose

(ii) Scope: This specifies characteristics and methods of test for the construction and performance of fire hose systems with lay-flat hose permanently connected to a water supply.

Furthermore, it provides also for characteristics on assessment and verification of constancy of performance and marking of these products. Product characteristics may apply in general for other applications, for example in marine applications or in aggressive environments, but additional characteristics may be necessary in such cases.

(iii) Intended use:

Fixed installations in construction works to provide the occupants the means to control and extinguish a fire nearby.

(iv) The essential characteristics (ECs) according to the mandate which will be dealt with in the above standard will be:

Distribution of extinguishing media

- Hose bore
- Minimum flow rate
- Effective throw range
- Spray discharge

Operational reliability

- Hose, General
- Shut-off nozzle, General
- Shut-off nozzle, Resistance to impact
- Shut-off nozzle, Operating torque
- Inlet stop valve
- Hydraulic properties, resistance to internal pressure
- Hydraulic properties, security of couplings

Ability to pull out the hose

- Type 1 Reel
- Type 1 and 3 supports swinging

(v) Durability

NONE

(vi) Other aspects

The harmonised standard will also contain:

- a reference to the Commission's Decision on attestation of conformity;
- clauses on assessment and verification of constancy of performance;

- guidance on the characteristics to be stated in the labelling accompanying the CE marking and on the way of expressing the determined values of these characteristics.

B.1.1.2.2 Supporting standards

None

B.1.1.2.3 Additional information, comments and remarks

None

D.2.1 FIRE AND SMOKE CONTROL INSTALLATION – COMPONENTS

D.2.1.1 FIXED/AUTOMATIC SMOKE BARRIERS

D.2.1.1.1 Harmonized product standard: EN 12101-1

Availability
Published

(i) Title: Smoke and heat control systems - Part 1: Specification for Smoke Barriers

(ii) **Scope:** This European Standard specifies characteristics, and test/assessment methods and compliance criteria of the test results for smoke barriers which comprise the barrier itself, with or without associated activation and drive devices. It does not cover barriers made of part of the building's structure.

(iii) **Intended uses:** Smoke barriers to be installed in smoke control system in construction works.

(iv) The essential characteristics (ECs) according to the mandate which will be dealt with under the above standard will be:

Fire resistance

- stability duration under constant temperature (D)
- stability duration under the standard time-temperature curve (DH)
- Smoke leakage (s)

Nominal activation condition sensitivity

- initiation device (Active fire barriers) immediate response
- Closing mechanisms

Response delay (response time)

- reliability
- gravity fail-safe

Operational reliability

- cycle tests

Deployment safety

- Deployment speed

(v) Durability

The durability is considered to be fulfilled by having carrying out **Response delay (response time) Operational reliability** and **Deployment safety**

Static barriers are not considered to be subject to detrimental aspects affecting the essential characteristics.

(vi) Other aspects

This harmonized product standard will also contain:

- reference to the Commission decision(s) on attestation of conformity,
- clauses on assessment and verification of constancy of performance
- guidance on the characteristics to be stated in the labelling accompanying the CE marking.

D.2.1.1.2 Supporting standards

None

D.2.1.1.3 Additional information/remarks

None.

D.2.2 SMOKE CONTROL DAMPERS

D.2.2.1 Harmonized product standard EN 12101-8

Availability
Published

(i) Title: Smoke and heat control systems – Smoke control dampers

(ii) Scope:

This European Standard applies to smoke control dampers. This standard specifies product characteristics and gives reference to the test/assessment methods and compliance criteria of the test results test methods defined for smoke control dampers

Furthermore, provision on marking and information on of these products are also given in informative annexes.

This European Standard distinguish between two categories of smoke control dampers, i.e. single compartment smoke control dampers and multi-compartment fire resisting smoke control dampers.

This standard does not consider in detail the detrimental and/or corrosive effects that may be caused by process chemicals present in the atmosphere, which are drawn through the system intentionally or inadvertently.

(iii) Intended use:

Smoke control dampers that are to be used as part of a pressure differential system or smoke and heat control system. in construction works,

(iv) The essential characteristics according to the mandate which will be dealt with in the above standard will be:

Nominal activation conditions/sensitivity.:

- Time to close after indication of alarm

Response delay (response time).

- Time to close after indication of alarm

Operational reliability.

- Cycling

Resistance to fire:

- Integrity/insulation (EI);
- integrity (E) (for multi-compartment)
- integrity (E₃₀₀ – E₆₀₀) (for single-compartment)
- Smoke leakage (S);
- Mechanical stability (under E)
- Maintenance of the cross section (under E)

(v) Durability:

Durability of operational reliability:

- Open and closing cycle tests.

(vi) Other aspects:

This harmonized product standard will also contain:

- references to other directives and compliance conditions applying to the product,
- reference to the Commission decision(s) on attestation of conformity,
- clauses on assessment and verification of constancy of performance
- guidance on the characteristics to be stated in the labelling accompanying the CE marking.

D.2.2.2 Supporting standards

None

D.2.2.3 Additional information, comments and remarks

None

D.2.3 SMOKE CONTROL DUCT SECTIONS

D.2.3.1 Harmonized product standard EN 12101-7

Availability
Published

(i) Title: Smoke and heat control systems – Smoke control duct sections

(ii) Scope:

This standard specifies product characteristics and gives reference to the test methods/assessments and gives test results and compliance criteria of the test results defined for smoke control duct sections

Furthermore, information on installation and maintenance of these products are also given in Informative annexes

This standard does not consider in detail the detrimental and/or corrosive effects that may be caused by process chemicals present in the atmosphere, which are drawn through the system intentionally or inadvertently.

Duct sections for use other than in smoke and heat exhaust/control systems are not covered by this standard.

(iii) Intended use

Smoke control duct sections that are to be used as part of a pressure differential system or smoke and heat exhaust system in construction works.

(iv) The essential characteristics according to the mandate which will be dealt with in the above standard will be:

Resistance to fire:

- Integrity (E);
- Insulation (I);
- Smoke leakage (S);
- Mechanical stability (under E);
- Maintenance of cross section (under E).

(v) Durability:

There are no known aspects affecting the durability of the resistance to fire

(vi) Other aspects:

This harmonized product standard will also contain:

- a reference to the Commission decision(s) on attestation of conformity,
- clauses on assessment and verification of constancy of performance,
- guidance on the characteristics to be stated in the labeling accompanying the CE marking.

D.2 .3.2 Supporting standards

None

D.2.3.3 Additional information, comments and remarks

None

D.2.4.1 Harmonized product standard EN 12101-3

WI 00191176

Dates of availability:

Stage 32: Achieved;

Stage 40: Achieved;

Stage 49: 2012-06-01

(i) Title: Smoke and heat control systems – Part 3: Specification for powered smoke and heat control ventilators (Fans)

(ii) Scope: This European Standard specifies the product characteristics of powered smoke and heat control ventilators (fans) put. It provides test and assessment methods of the product characteristics and the compliance criteria of test and assessment results.

This European Standard applies to the following:

- a) fans for smoke and heat control ventilation;
- b) impulse/jet fans for smoke and heat control ventilation;

(iii) Intended use:

To be used as part of a powered smoke and heat control ventilation system in construction works.

(iv) The essential characteristics according to the mandate which will be dealt with in the above standard will be:

Response delay (response time).

- opening under wind, snow load within a given time

Operational reliability.

- application categories
- motor rating

Effectiveness of smoke/hot gas extraction

- gas flow and pressure maintenance during smoke and heat extraction test

Resistance to fire

- functionality

Ability to open under environmental conditions.

- opening under wind, snow load within a given time.

(iv) Durability:

Durability of operational reliability

- motor rating

(vi) Other aspects

This harmonized product standard will also contain:

- a reference to the Commission decision(s) on attestation of conformity,
- clauses on assessment and verification of constancy of performance,
- guidance on the characteristics to be stated in the labelling accompanying the CE marking.

D.2.4.2 Supporting standards

None

D.2.4.3 Additional information, comments and remarks

None

D.2.5.1 Harmonized product standard: EN 12101-2

Status

Published

(i) Title: Smoke and heat control systems - Part 2: Natural smoke and heat exhaust ventilators

(ii) Scope:

This European Standard applies to natural smoke and heat exhaust ventilators operating as part of smoke and heat exhaust systems.

This standard specifies product characteristics and gives test methods and compliance criteria of the test results.

(iii) Intended uses:

Natural smoke and heat exhaust ventilators intended to be installed in smoke and heat control systems in construction works.

(iv) The essential characteristics according to the mandate which will be dealt with in the above standard will be:

Nominal activation condition sensitivity.

- initiation device
- opening mechanism
- inputs and outputs

Response delay (response time).

- reliability
- opening under (snow, wind) load
- low ambient temperature
- opening under heat

Operational reliability

- Reliability

Effectiveness of smoke/hot gas extraction

- aerodynamic free area

Performance parameters under fire conditions

- resistance to heat
- mechanical stability
- reaction to fire

Performance under environmental conditions:

- open under load
- low ambient temperature
- stability under wind load
- resistance to wind induced vibration
- resistance to heat

(v) Durability

- of response delay (response time)

- reliability
- opening under (snow, wind) load
- low ambient temperature
- opening under heat

- of operational reliability
 - reliability
- of performance parameters under fire conditions

(vi) Other aspects

This harmonized product standard will also contain:

- a reference to the Commission decision(s) on attestation of conformity,
- clauses on assessment and verification of constancy of performance
- guidance on the characteristics to be stated in the labelling accompanying the CE marking.

D.2.5.2 Supporting standards

None

D.2.5.3 Additional information/remarks

None

D.2.6.1 Harmonised product standard: EN 12101-9

Dates of availability:
Stage 32: Achieved;
Stage 40: Achieved;
Stage 49:

(i) Title: Smoke and heat control systems – Part 9: Control equipment

Scope: This standard specifies product characteristics of control equipment operating as part of smoke and heat exhaust systems and gives test methods, assessment methods and compliance criteria of the test results.

(iii) Intended use: Control equipment to be used for smoke and heat control systems in construction works.

(iv) The essential characteristics according to the mandate which will be dealt with in the above standard will be:

Response delay (Response time):

- reception and processing of fire signals
- reset from the fire condition
- reception and processing of fault signals
- reset of fault indications (if provided)
- deadlock (if provided)
- Output of the fire alarm condition (if provided)

Performance under fire conditions:

- control panel inputs and outputs
- visual indication
- audible indication (if provided)
- operational delay (if provided)
- output to systems other than SHCS (if provided)
- co-occurrence detection (Type D if provided)
- dependency on more than one alarm signal (if provided)

(v) Durability

The durability of response time and the performance parameters under fire conditions is dealt with by:

- operation under cold conditions
- operation under damp heat, steady state
- operation under impact
- operation under vibration, sinusoidal
- endurance under damp heat, steady state
- endurance under vibration, sinusoidal
- operation under dry heat
- endurance under SO₂ corrosion
- endurance under salt spray
- protection against water
- protection against substance
- operation under EMC

(vi) Other aspects

This harmonized product standard will also contain:

- a reference to the Commission decision(s) on attestation of conformity,
- clauses on assessment and verification of constancy of performance
- guidance on the characteristics to be stated in the labelling accompanying the CE marking.

D.2.6.2 Supporting standards

None

D.2.6.3 Additional information/remarks

None

D.2.7.1 Harmonized product standard : EN 12101-10

Status

Published

(i) Title: Smoke and heat control systems – Part 10: Power supplies

(ii) Scope: This Standard specifies product characteristics of power supplies operating as part of smoke and heat exhaust systems and gives test methods, assessment methods and compliance criteria of the test results

(iii) Intended uses: power supplies for smoke and heat control in construction works.

(iv) The essential characteristics according to the mandate which will be dealt with under the above standard will be:

Operational reliability

- primary power sources
- secondary power source (battery if provided)
- secondary power source (generator if provided)
- recognition and indication of faults
- compressed gas supplies (compressors if provided)
- mechanical design

Response time

- operation at the end of the maximum standby period
- operation time of generators to respond
- switching from one power source to the other causes

Performance parameters under fire conditions

- compatibility with smoke control equipment

(v) Durability

Durability of the response time, operational reliability and the performance parameters under fire conditions

- operation under cold conditions
- operation under damp heat, steady state
- operation under impact
- operation under vibration, sinusoidal
- endurance under damp heat, steady state
- endurance under vibration, sinusoidal
- operation under dry heat
- endurance under SO₂ corrosion
- endurance under salt spray
- protection against water
- protection against substance
- operation under EMC

(vi) Other aspects

This harmonized product standard will also contain:

- a reference to the Commission decision(s) on attestation of conformity,
- clauses on assessment and verification of constancy of performance
- guidance on the characteristics to be stated in the labelling accompanying the CE marking.

D.2.7.2 Supporting standards

None

D.2.7.3 Additional information/remarks

None