



EUROPEAN COMMISSION
DG ENTR
Construction

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MANDATE TO CEN/CENELEC
CONCERNING THE EXECUTION OF STANDARDISATION WORK FOR
A HARMONISED STANDARD ON

Chimneys, flues and specific products

RELATED TO THE FOLLOWING END USE
08/33 FRAMES (INCLUDING CHIMNEYS AND SHAFTS)

CONSOLIDATED VERSION

*This mandate has been approved in 1995 as CONSTRUCT 95/132 B Rev. 1
It has been amended by the mandate M130 (dangerous substances)
It has been amended by mandate M117, M123, M133, M 134 concerning fire aspects.
It as been amended after opinion of SCC the 11 November 2003 following the
amendment included in the document CONSTRUCT 03/615 Rev.1*

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of the standardisation mandates issued by the Commission to CEN/CENELEC within the context of the Council Directive 89/106/EEC of December 21, 1988 concerning construction products, hereafter referred to as "the Directive" or CPD.

The main aim of the Directive is the removal of technical barriers to trade in the construction field, to the extent that they cannot be removed by mutual recognition of equivalence among all the Member States. Therefore, in a first phase, the standardisation mandates will refer to products for which all of the two following conditions are fulfilled :

- a) the products are subject to technical barriers to trade;*
- b) the characteristics of the products influence the satisfaction by the construction works, in which they are to be incorporated in a permanent manner, of the essential requirements set out in article 3 of the Directive. These works are subject to legislative,*

*regulatory or administrative regulations of Member States covering such essential requirements*¹

The present mandate is intended to provide for the harmonised European standards that are needed in order to make possible the "approximation" of national laws, regulations and administrative provisions, hereafter referred to as "regulations". This approximation is expected to be done by adapting the national regulations to take full account of the mandated harmonised standards.

In this respect, the standardisers will refer to the basic principles prevailing in the regulations of Member States as described in the interpretative documents (ID), particularly in chapter 3, and, where applicable, to the more detailed description given within chapter 4.2 of the same documents.

As stated by the Directive, the responsibility Member States have for construction works on their territory remains unchanged.

The essential requirements being expressed in terms of performance of the works, the characteristics of the products should be also expressed in terms of performance so that, in referring to the harmonised European standards, the regulations may "approximate" evolving in terms of "performance requirement".

Regulations that directly influence the nature of products will then be justified only in those cases in which a classification system is identified as the means of expressing the range of requirement levels of performance of the works (ID 1 point 1.2.1.2). Thus the harmonised standards covered by the present mandate should focus on the definition of the products and its CPD characteristics, on the relevant methods of determination of these characteristics (by calculation, testing,...) and, if necessary, the classification system of characteristics, if articles 3.2 and 6.3 of the Directive apply. Harmonised standards will also take into account all the current intended uses of the product, the evaluation of conformity and the labelling accompanying the CE marking, which will contain the values of the characteristics of the product on the basis of the technical specifications.

A minimum or a maximum level of a given characteristic that has to be met by family of products or a product, may be identified by the harmonised standard if required by an agreement of Member States expressed by positive vote under article 20 procedure (e.g. for masonry units, a compressive strength not less than $2N/mm^2$).

The CEN programme in response to this mandate should consist of a compact, simple package of items that are manageable and user-friendly for regulators, producers, notified bodies and users. In general one harmonised standard should be sufficient to cover the main performances of a given family of products.

A producer not wishing to meet the non-mandated European standards will be able to use the CE marking on his product by referring only to the set of harmonised standards. On the other hand, if a non-mandated standard includes also the entire content of the

¹ Any other type of barrier to trade falls within articles 30/36 of the Treaty, and must be directly eliminated by the Member State.

harmonised standard, compliance with the former standard may give also presumption of conformity to the harmonised standard and will enable the bearing of the CE marking. In this case, an appropriate system of reference should be established in the European standard in order to clearly distinguish the CPD-related content from the remaining part of the standard.

II. GROUNDS

1. This mandate falls within the framework of the general policy of the Commission with respect to technical harmonisation and standardisation, as well as within the scope of the Directive.
2. This mandate is based on article 7 of the Directive and has regard to the interpretative documents ⁽²⁾ that serve as reference for the establishment of the harmonised standards (see article 12 of the Directive). It serves to ensure the quality of the harmonised standards for products, always with reference to the state of the art, with particular reference to:
 - the fitness of the products listed in annex 1 intended to be used in **FRAMES**, enabling the works to satisfy the essential requirements set out in annex 1 of the Directive, provided that barriers to trade in these products exist and that the products fall within the scope of article 2.1 of the Directive;
3. With regard to possible levels of requirements for the works, these are determined in the interpretative document or according to the procedure provided for in article 20 (2) of the Directive. In either of these cases, where levels of requirements for works are determined, guidance is given in Annex 3 to this mandate. This is not the case for classes of convenience, which are classes of product performances developed as a means of convenience for specifiers, manufacturers and purchasers. Such classes of convenience are not covered by the present mandate and should not be defined within the harmonised standard. Nevertheless, the results of the determination of the product characteristics may be expressed making use of classes of convenience introduced by European standards other than those developed under this and other similar mandates for harmonised standards. Articles 3.2 and 6.3 of CPD do not apply to such classes.
4. Harmonised standards including classifications where appropriate, should permit construction products which allow works to meet the essential requirements and which are produced and used lawfully in accordance with technical traditions warranted by local climatological and other conditions to continue to be placed on the market.
5. The purpose of the Directive is to remove barriers to trade, the standards deriving from it will therefore be expressed, as far as practicable in product performance terms (art. 7.2 of the Directive), having regard to the interpretative documents. Where this is not practicable, justification will be made in the Work Programme when it is presented to the Commission (see IV.1 and IV.2). As far as possible, each

⁽²⁾ O. J. N° C 62, 28.02.1994

standard will make reference to performances common to other standards developed under mandate and which constitutes a cohesive and compatible group of European harmonised standards developed in parallel.

6. The work programme that CEN/CENELEC will develop in response to this mandate shall be a comprehensive one covering the complete package of product standards needed for the CE marking of the product. It will include the time scale for the publication of the complete package of harmonised standards and will refer as far as possible to horizontal standards which cover a number of different families of products and define the determination method of a given product performance.

III. STANDARDISATION MANDATE

With reference to the grounds given in section II and further provisions of the Directive, the European standard(s) set up under this mandate shall take account of the following:

1. Harmonised standards shall be prepared to allow those products listed in Annex 2 to be able to demonstrate in performance terms, for the satisfaction of the essential requirements. Further specific mandates will cover the remaining products within the list of annex 1.
2. The standard will contain:
 - A detailed scope and field of application
 - A detailed description of the family of products covered and the relevant intended uses of the different products.
 - The definition of the characteristics of the products (expressed in performance terms) that are relevant to the satisfaction of the essential requirements as listed in Annex 2 of the mandate
 - The methods (calculation, test methods or others) or a reference to an harmonised standard containing the methods for the determination of such characteristics
 - Guidance on the characteristics that have to be stated within the labelling that will accompany the CE marking (depending on the intended use of the product) and on the way of expressing the determined values of these characteristics.
 - The classification system and the levels for the above values of characteristics, if required by the mandate
 - The system for attestation of conformity as required in annex 3 of the mandate and the corresponding specific provisions of evaluation of conformity.

Testing and/or calculation methods shall have, whenever possible, a horizontal character covering the widest possible range of products

3. This mandate replaces any provisional mandate on the same products formerly issued on a provisional base by the Commission. Some products have applications beyond the end uses covered by this mandate. Annex 1 identifies the other mandates under which such products fall.
4. As far as other directives are concerned, the relevant essential requirements are to be taken into account and will be indicated in the work programme, submitted for the final agreement of the Commission.

5. CEN/CENELEC shall ensure consistency within the whole package of standards in the field concerned.
6. As far as practicable and depending on the intended use, the standard shall include a definition of the durability in term of performance of the declared values of the product characteristics as well as suitable methods for its evaluation against the actions listed in Annex 2. Where appropriate the durability may be expressed in the standard by a conventional value without resorting to any test method. If the durability is expressed in terms of classes of periods, articles 3.2 and 6.3 will not apply.
7. Where a classification system of the product performances is envisaged in Annex 3 of the present mandate, CEN/CENELEC are requested to make an appropriate proposal.
8. The relevant systems for attestation of conformity according to Article 13.3 and Annex III of the Directive, are listed in annex 3. For the establishment of the corresponding specific provisions of evaluations of conformity, the harmonised standard will take into account:
 - the different intended uses of the product and, if any, the different levels of performance according to paragraph 7 above;
 - cases of individual (non series) production according to Article 13.5 of the Directive;
 - requirements of other directives.
9. The label accompanying the CE marking will list all the characteristics required by the mandates clearly distinguishing the characteristics to be declared for general uses from those relevant to specific uses of the product which are left to the free choice of the producer. Characteristics for which the "No performance determined" class applies are also listed in the labelling.
10. Where appropriate, Annex 4 contains the list of dangerous substances to be covered by the harmonised standard when defining their rate of release.

IV. EXECUTION OF THE MANDATE

1. CEN/CENELEC will present the Commission with a detailed proposal for the work programme, at the latest, by the end of **January 1996**.
2. This programme will include the list of standards considered necessary to ensure the fitness for use of the products covered by the mandate, in accordance with article 4.2 of the Directive.

In this programme the title of each standard will be followed by:

 - a detailed description of the scope, the product characteristics and the intended uses covered by each standard,
 - the list of reference documents (national standards, ISO standards, prENs, ENs, research results, etc.),
 - the timetable for the development and the publication of the standard,
 - the identification of the Technical Committees responsible.

3. When a subject (e.g. test methods) is common to a number of products it will, as far as possible, be dealt with in a horizontal standard referring to a group or a family of products.
4. Within the programme, CEN/CENELEC will specify which aspects (characteristics, products, specific intended uses,...) among those indicated by the mandate are not yet covered by the programme and the relevant reasons. Products not specifically mentioned in the mandate but relevant to the family referred to may be also included in the programme. CEN/CENELEC will also specify those cases where the performance approach will not be followed in the harmonised standard and will give the relevant justification.
5. After examination of the programme and consultations with CEN/CENELEC, the Commission will endorse the timetable and the list of standards or parts of standards which meet the terms of this mandate and which will be recognised as harmonised standards.
6. When considered appropriate, the list of existing standards or standards under development that are not candidates for the status of harmonised standards but are relevant to the family of products covered by the mandate, may be annexed to the work programme.
7. Acceptance of this mandate by CEN/CENELEC is intended only after the work programme mentioned at point IV.1 has been endorsed by the Commission. The terms of reference of the mandate will be subject to possible modification or addition, if necessary.
8. Representatives of the authorities responsible for national regulations will be able to participate in the activities of CEN/CENELEC through their national delegations and to present their points of view at all stages of the drafting process.
9. The Commission may participate in standardisation activities as other observers and has the right to receive all relevant documents.
10. CEN/CENELEC will immediately inform the Commission of any problem relating to the carrying out of the mandate from within the Technical Committees and will present an annual progress report on work within the framework of the mandate.
11. The progress report will include a description of work carried out, and information on any difficulties being met, whether political or technical, with particular reference to those that might lead the authorities of a Member State to raise objections or to resort to article 5.1 of the Directive.
12. The progress report will be accompanied by the latest drafts of each standard under the mandate and by updated reports on any subcontracted work.
13. Acceptance of this mandate by CEN/CENELEC will initiate the standstill procedure referred to in article 7 of Council Directive 83/189/EEC of 28 March 1983 modified

by Council Directive 88/182/EEC of 22 March 1988 and the European Parliament and the Council Directive 94/10/EC of 23 March 1994.

14. CEN/CENELEC will develop the draft harmonised European standards (prENs) in accordance with the appropriate work programme and will inform the Commission in good time that the draft is being circulated for public comment.
15. CEN/CENELEC will present the final drafts of the harmonised European standards to the Commission for confirmation of compliance with this mandate at the latest in accordance with the timetable agreed between CEN/CENELEC and the Commission and referred to in point IV.5.
16. CEN/CENELEC members will publish the standards transposing the harmonised European standards at the latest 6 months after a positive vote in CEN/CENELEC. National standards covering the same scope will continue to be applicable until the date agreed between CEN/CENELEC and the Commission in accordance with point IV.5.

ANNEX 1

SCOPE

CHIMNEYS, FLUES AND SPECIFIC PRODUCTS

LIST OF PRODUCTS COVERED BY THIS MANDATE

TO BE USED IN : 8/33 FRAMES (INCLUDING CHIMNEYS AND SHAFTS)

FORM	MATERIALS	PRODUCTS FOR CONSIDERATION
Pipes Sections	clay/ceramic concrete metal plastics	Precast sections for concrete chimneys. Preformed sections for metal chimneys. Concrete and refractory flue liners. Steel and vitreous enamel liners. Flexible aluminium and stainless steel liners. Twin or triple wall flues. Flues with insulated casings. Prefabricated flues and chimneys
Blocks	stone clay/ceramic concrete	Flue and chimney blocks/bricks Block and liner systems Concrete monoblock flue systems
Components	clay/ceramic concrete metal	Flue terminals e.g. cowls, pots, ridge terminals Balanced flue devices attached chimneys free-standing chimneys

ANNEX 2

TECHNICAL TERMS OF REFERENCE

CHIMNEYS, FLUES AND SPECIFIC PRODUCTS

TO BE USED IN : 8/33 FRAME (INCLUDING CHIMNEYS AND SHAFTS)

FAMILY AND SUB-FAMILIES OF PRODUCTS

CHIMNEYS, FLUES AND SPECIFIC PRODUCTS

(buildings elements and kits which convey smoke and combustion gases from a combustion appliance to the outside air)

PREFABRICATED CHIMNEYS : STOREY HEIGHT ELEMENTS

Compatible chimney components obtained from one manufacturing source with product responsibilities for whole chimney

FLUE LINERS : ELEMENTS OR BLOCKS

Parts of a chimney used for conveying flue gases from fire places and heating appliances to the atmosphere. (precast sections for concrete chimneys, preformed sections for metal chimneys, concrete and refractory flue liners, flexible stainless steel liners, flues with insulated casings, prefabricated flues...). Also includes connecting flue pipes between appliance and chimney

MULTI-WALL CHIMNEYS : ELEMENTS OR BLOCKS

Composite chimneys and their components having inner liner, connectional pieces and ancillaries used to convey the products of combustion from appliances to the atmosphere (twin or triple-wall flues, balanced flue devices...)

SINGLE WALL CHIMNEY BLOCKS :

Flue blocks used in the construction of chimneys which serve to convey products of combustion from fire place or heating appliances to the atmosphere (block and liner systems, concrete monoblock flue system...)

Characteristics to be covered by the harmonized standard will be :

E. R.	PERFORMANCE CHARACTERISTICS	DURABILITY
1		
2	<ul style="list-style-type: none"> - Fire reaction <i>(for plastics liners)</i> - Fire resistance <ul style="list-style-type: none"> * Soot fire resistance G <i>(for components subjects to soot fire)</i> * insulation I <i>(for components having a separating function)</i> * Integrity E <i>(for components having a separating function)</i> 	
3	<ul style="list-style-type: none"> - Gas tightness/leakage - Flow resistance <i>(when relevant)</i> - Dimensioning / Thermal resistance <i>(when relevant)</i> - Thermal shock resistance 	Y <i>(against chemicals/corrosion)</i>
4	<ul style="list-style-type: none"> -Strength : <ul style="list-style-type: none"> * flexural tensile * compressive -Resistance to freeze-thaw <i>(if relevant)</i> 	Y <i>(against chemicals)</i> Y <i>(against chemicals)</i>
5		
6		

KITS OF FREE STANDING CHIMNEYS AND ATTACHED CHIMNEYS

Chimneys put on the market that are installed using a combination of compatible chimney components obtained from one manufacturing source with product responsibilities for whole chimney

Characteristics to be covered by the harmonized standard will be :

E. R.	PERFORMANCE CHARACTERISTICS	DURABILITY
1	resistance to wind load - stability -Strength : * compressive	Y (against chemicals/corrosion)
2	- Fire reaction <i>(for plastics liners)</i> - Fire resistance * Soot fire resistance G <i>(for components subjects to soot fire)</i> * insulation I <i>(for components having a separating function)</i> * Integrity E <i>(for components having a separating function)</i>	
3	- Gas tightness/leakage - Flow resistance - Dimensioning/Thermal resistance - Thermal shock resistance	Y (against chemicals/corrosion)
4	-Strength : * tensile <i>(only for means of connection for attached chimneys)</i> -Resistance to freeze-thaw <i>(if relevant)</i>	Y (against corrosion)
5		
6		

CHIMNEY TERMINALS :

Fittings installed at the outlet of a chimney which may have aerodynamic properties used in the construction of chimneys which serve to convey products of combustion from fire place or heating appliances to the atmosphere (chimney fans, flue terminals e.g. cowls pots, ridge terminals...)

Characteristics to be covered by the harmonized standard will be :

E. R.	PERFORMANCE CHARACTERISTICS	DURABILITY
1		
2		
3	- Flow resistance	
4		
5		
6		

CHIMNEYS, FLUES AND SPECIFIC PRODUCTS

Characteristics to be in the harmonised standard					
ER	Performance characteristic	elem. chim.	kits	terminals	durability
1	-Resistance to wind load -Strength : * compressive		Y Y		Y (against chemicals/corrosion)
2	- Fire reaction (for plastics liners) - Fire resistance * Soot fire resistance G (for components subjects to soot fire) * insulation I (for components having a separating function) * Integrity E (for components having a separating function)	Y Y	Y Y		
3	- Gas tightness/leakage - Flow resistance - Dimensioning/Thermal resistance - Thermal shock resistance	Y Y Y Y	Y (a) Y (a) Y Y	Y	Y (against chemicals/corrosion)
4	-Resistance to freeze-thaw (if relevant) -Strength : * tensile (only for means of connection) * flexural tensile * compressive	Y Y Y	Y Y		Y (against corrosion) Y (against chemicals)
	(a) When relevant				

ANNEX 3

ATTESTATION OF CONFORMITY

Product family : Chimneys, flues and specific products (1/1)

1. Levels and classes for product performances

- (1) According to article 3.2 of the CPD and Clause 1.2.1 of the IDs, a classification of product performance has been identified as the means of expressing the range of requirement levels of the works in respect of **reaction to fire**.

CEN/CENELEC are requested to follow the Commission Decision 2000/147/EC [O.J. L50, 23.2.2003 p.14] and make reference to the standard(s) to be prepared under Commission mandate "Horizontal complement to the 33 mandates in respect of reaction to fire" in dealing with reaction to fire in the specific harmonised product standards to be developed under this mandate.

- (2) Reaction to fire is a risk for which the need for a classification system for products has been identified for the time being.

Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1).

2. Systems of attestation of conformity

For the product and intended use listed below, CEN/CENELEC are requested to specify the following system of attestation of conformity in the relevant harmonised standard/s :

Product	Intended use	Level/s or class/es <i>(Reaction to fire)</i>	Attestation of conformity system
prefabricated chimneys (storey height elements), flue liners (elements or blocks), multi-shell chimney (elements or blocks), single walled chimneys blocks, kits of free standing chimneys and attached chimneys	chimneys	Any	2+
----- chimney terminals	-----	----- Any	----- 4
System 2+ : See CPD Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body on the basis of its continuous surveillance, assessment and approval System 4: See CPD Annex III.2.(ii), Third possibility			

3. **Conditions to be applied by CEN on the specifications of the attestation of conformity system**

- 3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [*see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents*]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.
- 3.2 For products under system 2+, regarding the initial inspection and certification of the factory production control, the parameters related to the following characteristics shall be of the interest to the approved body: **all the characteristics.**

For products under system 2+, regarding the continuous surveillance, assessment and approval of the factory production control, parameters related to the following characteristics shall be of interest to the approved body:

Compressive strength and **Resistance to wind load** (for kits of free standing chimneys and attached chimneys).

Euroclasses characteristics for reaction to fire (for plastic liners) as indicated in Commission Decision 94/611/EC

ANNEX 4 DANGEROUS SUBSTANCES

European Technical Specifications must be adopted taking into account the necessary legislation on substances classified as dangerous.

This results from the Interpretative Documents, where it is noted in the introduction note to all six Interpretative Documents, that :

"Concerning dangerous substances which are in construction products, classes and/or levels of performance to which technical specifications will refer, shall allow the levels of protection needed by the works to be guaranteed, taking into account the purpose of the works."

In addition, outside the scope of the Directive, writers of technical specifications must take into account legislation which affects material to be used for construction products, and which are regulated for reasons not related to the incorporation into the works of the construction products.

In order to permit technical specification writers to take into account the necessary legislation, a working document was elaborated by the Commission services (doc. CONSTRUCT 95/148 Rev.1 of January 4, 1996). Specification writers should use this document as a guide but must also take account of any other relevant legislation or dangerous substances which the working document does not yet include.