

#### **EUROPEAN COMMISSION**

ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Chemicals, metals, mechanical, electrical and construction industries; Raw materials Construction, Pressure Equipment, Metrology

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# MANDATE TO CEN CONCERNING THE EXECUTION OF HARMONISATION WORK FOR HARMONIZED STANDARDS ON

# EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS/KITS WITH RENDERING (ETICS)

#### RELATED TO THE FOLLOWING END USES:

04/33 EXTERNAL WALLS (INCLUDING CLADDING),

11/33 EXTERNAL FINISHES OF WALLS

#### **FOREWORD**

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

One of the aims of the Directive being the removal of technical barriers to trade in the construction field, in so far as they cannot be removed by means of mutual recognition among Member States, it seems appropriate that mandates cover, at least during a first phase of the mandating programme, construction products likely to be subject to technical barriers to trade.

This mandate is intended to lay down provisions for the development and the quality of the harmonized European standards in order, on the one hand, to make "approximation" of national laws, regulations and administrative provisions (hereafter referred to as "regulations") possible and, on the other hand, to allow products conforming to them to be presumed to be fit for their intended use, as defined in the Directive.

In this respect, this mandate takes account of the basic principles prevailing in the regulations of Member States, particularly those described in chapters 3 and 4.2 of the Interpretative Documents, to which standardisers must refer. As stated by the Directive, the responsibility Member States have for construction works on their territory remains unchanged.

In order to fulfil the provisions of article 7.1 of the CPD the present mandate has been structured in the following way:

Chapter I Grounds: General conditions within the framework of the CPD.

Chapter II Execution of the mandate: Conditions regarding the programming, development and execution of the work on the standards.

Chapter III Harmonized standards: Conditions regarding the content and the presentation of the harmonized standards.

Responsible person: Georgios Katsarakis (georgios.katsarakis@ec.europa.eu)

#### CHAPTER I: 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. It replaces any previous mandate on the same products formerly issued on a provisional base by the Commission.
- 2. This mandate is based on article 7 of the Directive and has taken into consideration the Interpretative Documents<sup>1</sup> that serve as reference for the establishment of harmonized standards. It serves to ensure the quality of harmonized 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 EXTERNAL WALLS and in EXTERNAL FINISHES OF WALLS 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. Levels or classes of requirements for the works are under the responsibility of Member States and are not covered by the present mandate. As a consequence, they are not expected to be defined in the harmonized standards.
- 4. Levels or classes of requirements for the products may be determined either in the Interpretative Documents or according to the procedure provided for in article 20 (2) of the Directive. In either case, where levels or classes of requirements for products 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 harmonized standards. Nevertheless the result of the determination of the product performance may be expressed using classes of convenience introduced in European standards. Articles 3.2 and 6.3 of the CPD do not apply to such classes.
- 5. The harmonized standards resulting from this mandate must allow products to comply with it 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 a characteristic. Declaration of performance for such characteristic must not be imposed on the manufacturer if he does not wish to declare it.
- 6. Indications regarding the documents which should be taken into account to inform standardisers and manufacturers on national and harmonized legislation on substances classified as dangerous are given in Annex 4.

#### CHAPTER II: EXECUTION OF THE MANDATE

1. CEN will present the Commission with a detailed work programme, at the latest, by the end of three months after acceptance of the mandate.

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<sup>1</sup> OJ N°C 62, 28,02,1994

- 2. This programme will include all aspects considered necessary to ensure the quality of the standards in order to permit the assessment of the fitness for use (in accordance with Article 4 (2) of the Directive) of the products covered by the mandate. In particular it will contain the following:
  - a) the title of the standard;
  - b) the content of the standard, including reference to those items mentioned in III.2;
  - c) the list of supporting documents (national standards, ISO standards, prENs, ENs, ETAGs, research results, etc.) which might be used in the harmonized standards and indications of those documents that have to be developed by CEN;
  - d) the timetable for the development of the standard and its submission to the EC; and
  - e) the identification of the Working Group responsible;
- 3. Clear differentiation should be made between the item to become the harmonized standard for the product or product family and the items to be used as supporting documents.
- 4. Where practicable, CEN will make reference to harmonized methods of assessment. When a supporting test method for a characteristic does not exist or is not in the work programme of the CEN TC, a clear statement should be presented indicating whether CEN is able to produce one or not.
- 5. This mandate covers initially ETICS based on mineral wool and expended polystyrene. CEN is requested to evaluate if the consolidation of the relevant technical knowledge allows the elaboration of harmonised ENs for ETICS based on other families of insulation materials and to make an appropriate proposal to the Commission following the provisions of clause 6 hereunder.
- 6. Any proposals for the addition of products, intended uses, materials and forms not included in the mandate but considered relevant by the CEN TC shall be presented separately from the work programme for further analysis by the Commission services. Standards prepared for products outside of this mandate will not achieve the status of harmonized standards. In addition to the provisions of article 4.1 of the CPD, it must be taken into account that all the products included in the mandate have a system of attestation of conformity in accordance with the relevant Decision of the Commission; those products not included have not.
- 7. Any proposal for the addition of characteristics and durability aspects not included in the mandate but considered relevant by the CEN TC should be proposed in a special chapter of the work programme for further analysis by the Commission services.
- 8. Where a classification system of the product performances is envisaged in Annex 3 of the present mandate, CEN is requested to make an appropriate proposal for its implementation.
- 9. CEN TCs must give a technical answer for the determination of the characteristics of the mandate taking into account the conditions stated below; test methods suggested must be directly related to the characteristic required and must not make reference to determination methods for characteristics not required by the mandate. Durability requirements should be dealt with in the framework provided by the current state of the art.

10. Reference to test/calculation methods must be in accordance with the harmonisation aimed at. In general, only one method should be referred to for the determination of each characteristic, for a given product or family of products.

If, however, for a product or family of products because of justifiable reasons, more than one method is to be referred to for the determination of the same characteristic, the situation must be justified. In this case all referenced test methods should be linked by the conjunction "or" and an indication of application should be given.

In any other case, two or more test/calculation methods for the determination of one characteristic can be accepted only if a correlation between them exists or can be developed. The relevant harmonized product standard must then select one of them as the method of reference.

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

For the elaboration of the harmonized standards, the responsible CEN Technical Committee is requested to consider the already existing ETA Guideline on ETICS elaborated by EOTA. Concerning product assessment, the CEN Technical Committee is not obliged to follow the said ETA Guideline, if this can be justified by the consolidated knowledge of the product and experience. For all points concerning product assessment for which the CEN Technical Committee intends not to follow the said ETA Guideline, the CEN Technical Committee shall timely send to the Commission a detailed justification.

- 11. Within the work programme, CEN will also specify those cases where the performance-based approach will not be followed in the harmonized standard and will give the relevant justification.
- 12. After examination of the work programme and consultations with CEN, the Commission services will endorse the timetable and the list of standards which meet the terms of this mandate and which will be recognised as harmonized standards, as well as the list of supporting standards where relevant.
- 13. The terms of reference of this mandate may be subject to possible modification or addition, if necessary. Acceptance of the work programme by the Commission services does not imply acceptance of all the items listed as supporting documents. CEN TCs will need to demonstrate the direct link between items for harmonisation and the products, intended uses and characteristics given in the mandate. Nor does acceptance exclude the possibility for further items to be added by CEN in order to fully respond to the terms of the mandate
- 14. Representatives of the authorities responsible for national regulations have the right and shall be able to participate in the activities of CEN through their national delegations and to present their points of view at all stages of the drafting process of the harmonised standards.
- 15. The Commission may participate in the drafting process as observer and has the right to receive all relevant documents.
- 16. CEN will immediately inform the Commission of any problem relating to the carrying out of the mandate from within the TCs and will present an annual progress report on work within the framework of the mandate.

- 17. 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.
- 18. The progress report will be accompanied by the latest drafts of the standard under the mandate and by updated reports on any subcontracted work.
- 19. Acceptance by CEN of this mandate starts the standstill period referred to in Article 7 of the Directive 98/34/EC of 22 June 1998 (OJEU, L 204 of 21 July 1998, page 37).
- 20. CEN will develop the draft harmonized standards on the basis of the work programme.
- 21. CEN will present the final drafts of the harmonized standards to the Commission for confirmation of compliance with this mandate at the latest in accordance with the timetable agreed between CEN and the Commission and referred to in point II.2.d).
- 22. In order to permit compliance with provisions of article 11.3 of the CPD, CEN will provide the Commission with the harmonized standard, in accordance with the timetable agreed between CEN and the Commission and referred to in point II.2.d), after a positive vote in CEN.
- 23. CEN is also requested to consult with the European Commission Directorate General Joint Research Centre in order to explore if the Commission's research institutes dispose of specific competence to support the standardisation work.

#### CHAPTER III: HARMONIZED STANDARDS

- 1. Harmonized standards shall be prepared allowing the expression (in a common European way) of the performance of the products listed in Annexes 1 and 2 in relation to the essential characteristics. One of the purposes of the Directive being 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.
- 2. The harmonized standard will contain:
- A detailed scope and field of application
- A detailed description of the product or family of products covered and the relevant intended uses of the different products;
- The definition of the characteristics of the products listed in Annex 2 of the mandate (expressed in performance terms, as far as practicable) that are relevant to the satisfaction of the essential requirements;
- The methods (calculation, test methods or others) or a reference to a 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 for the evaluation of conformity.
- 3. A minimum or a maximum level of a given characteristic (e.g. for masonry units, a compressive strength not less than 2 N/mm<sup>2</sup>) that has to be met by the family of products or a product may be identified by the harmonized standard only if required by agreement of Member States expressed by positive vote under the procedure of Article 20 of the CPD.
- 4. As far as possible, each standard will make reference to performances common to other standards developed under mandate and which constitutes a cohesive and compatible group of harmonized European standards developed in parallel. CEN shall ensure consistency within the whole package.
- 5. A producer not wishing to meet a non-mandated European standard will be able to use the CE marking on his product by referring only to the relevant harmonized standard. On the other hand, if a non-mandated standard includes the entire content of the harmonized standard, compliance with the former standard will also give a presumption of conformity to the harmonized standard and will enable the bearing of the CE marking.

In the latter case, an appropriate system should be established in the European standard in order to clearly distinguish the CPD-related content from the remaining part of the standard.

- 6. Harmonized standards must 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 climatic and other conditions to continue to be placed on the market.
- 7. 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 harmonized European standards, the regulations may "approximate" evolving in terms of "performance requirements". As far as practicable and depending on the intended use mentioned in the annexes of this mandate, 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. If the durability is expressed in terms of classes of periods, articles 3.2 and 6.3 of the CPD will not apply.
- 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 harmonized standard will take into account:
- the different intended uses of the product mentioned in the annexes of this mandate and, if any, the different levels or classes of performance;
- cases of individual (non series) production according to Article 13.5 of the Directive;
- the recommendations of paragraph 3 of Annex 3
- 9. The label accompanying the CE marking will list all the characteristics to be declared according to the declared intended uses mentioned in the annexes of this mandate. In order to take into account existing regulations on products where performance for one or more characteristics may not be required, the label should allow the manufacturer the application of the "No performance determined" case for that or those characteristics.

#### FIELD OF APPLICATION

# EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS/KITS WITH RENDERING (ETICS)

LIST OF PRODUCTS TO BE INCLUDED IN THE MANDATE

TO BE USED IN:

04/33 EXTERNAL WALLS (INCLUDING CLADDING), 11/33 EXTERNAL FINISHES OF WALLS

FORM	MATERIALS	PRODUCTS FOR CONSIDERATION	
		External thermal insulation composite systems/kits with rendering, <sup>2</sup> in which the following elements may be integrated:	
Rigid sheets	mineral wool expanded polystyrene	Thermal insulation boards.	
Flexible sheets	glass fibres, steel mesh	Reinforcing meshes	
Components	metal plastics rubber	Profiles Anchors Pins Fittings Strips Joint covers	
Formless	binders admixtures additions aggregates	Renders	
	adhesives pigments	Adhesives Paints Martins	
	polymers	Mastics	

This mandate does not intend to establish conditions for the components but only for the kits as construction products.

#### TECHNICAL TERMS OF REFERENCE

# EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS/KITS WITH RENDERING (ETICS)

#### TO BE USED IN:

04/33 EXTERNAL WALLS (INCLUDING CLADDING), 11/33 EXTERNAL FINISHES OF WALLS

#### Family and subfamilies

#### EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS/KITS

Factory made thermal insulation boards made of mineral wool or expanded polystyrene, bonded onto the wall or soffit (masonry and/or concrete), or bonded plus mechanically fixed by anchors, faced with rendering consisting of one or more layers (site applied) and a reinforcement (glass fibre mesh). The rendering is applied directly to the insulating panels, without any air gap or disconnecting layer.

They are non loadbearing construction elements, but they may contribute to the durability of the structural elements by sheltering them from the climatic influences

Essential Characteristics of the ETICS to be covered by the harmonized standards are:

$\mathbf{E} \mathbf{R}$	PERFORMANCE CHARACTERISTIC	Durability
1		
2	<b>Reaction to fire</b> (for application of ETICS on walls subject to fire regulations)	<b>Y</b> (Against temperature, humidity, freeze/thaw,
3	Water tightness Water absorption Impact resistance to perforation Water vapour permeability Release of dangerous substances	
4	Fixing strength (for mechanically fixed kits) Bond strength (for bonded kits)	as relevant)
5	Airborne sound insulation	
6	Thermal resistance	

#### ATTESTATION OF CONFORMITY

# EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS/KITS WITH RENDERING (ETICS) (1/1)

#### 1. Levels and classes for product performances

1.1 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** and of **resistance to fire**.

Regarding reaction to fire, CEN is requested to follow the Commission Decision 94/611/EC [OJ. L 241 of September 1994] and make reference to the standard(s) to be prepared under Commission mandate to CEN/CENELEC "Horizontal complement to the mandates in respect of reaction to fire" in dealing with reaction to fire in the specific harmonised European standards to be developed under this mandate.

Regarding resistance to fire, the relevant classification system is indicated in the interpretative document n°2 and CEN is requested to make reference to the standard(s) prepared under Commission mandate to CEN/CENELEC "Horizontal complement to the mandates in respect of resistance to fire" in dealing with resistance to fire in the specific harmonised European standards to be developed under this mandate.

1.2 Reaction to fire and resistance to fire are risks for which the need for a classification 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).

Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN to make the appropriate proposal through a modification to this mandate.

#### 2. Systems of attestation of conformity

For the product(s) and intended use(s) listed below, CEN is requested to specify the following system of attestation of conformity in the relevant harmonized European standards:

Product(s)	Intended use(s)	Level(s) or class(es) (Reaction to fire)	Attestation of conformity system(s)		
External thermal insulation composite systems/kits with rendering (ETICS)	In external walls	An y	1		
System 1: See Annex III Section 2 point (i), of Directive 89/106/EEC, without audit-testing of samples.					

### 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.

#### **DANGEROUS SUBSTANCES**

### EXTERNAL THERMAL INSULATION COMPOSITE SYSTEMS/KITS WITH RENDERING (ETICS)

European technical specifications must be adopted taking into account necessary legislation on substances classified as dangerous.

This results from the Interpretative Documents, where it is noted, in the introduction note to all six of them, 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 materials to be used for construction products and which are regulated for reasons not related to the incorporation of the construction products into the works.

Specification writers will find relevant data on EU and national regulations with regard to ER 3 in the Commission's CP\_DS database <a href="http://ec.europa.eu/enterprise/construction/cpd-ds/">http://ec.europa.eu/enterprise/construction/cpd-ds/</a>, but must also take account of any other relevant legislation on dangerous substances, which the database does not yet include.