EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

M/100

Brussels, 7.09.1994

CONSTRUCT 94/125

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR FLOOR BEDS (INCLUDING SUSPENDED GROUND FLOORS), ROADS AND OTHER TRAFFICKED AREAS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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.

---

[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.

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

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 are not expected to impose limitations or prescriptions (such as end uses, minimum values of characterisitcs, method of production or installation) but should focus on the definitions of the CPD related characteristics, on the relevant methods of determination (by calculation, testing,...) and, if needed, the classification system 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 accompaning the CE marking which will contain the values of the characteristics of the product on the basis of the technical specifications.
Only in the case of a general agreement of Member States (expressed by positive vote under the article 20 procedure) for a minimum or a maximum level of a given characteristic that has to be met by family of products or a product, may such a requirement be identified by the harmonised standard (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 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 for use for **FLOOR BEDS (INCLUDING SUSPENDED GROUND FLOORS), ROADS AND OTHER TRAFFICKED AREAS** 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,

---

[2] O.J N°C 62, 28.02.1994

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 III.2 and IV.1). 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 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 I 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 November 1994.

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 III.7 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 ien 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

CONSTRUCT 94/122/1-33

LIST OF PRODUCTS COVERED BY MANDATE 1/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
	FORM		MATERIALS	
F	Bricks, blocks	e	stone	Paviors and flags of stone, cast stone, clay, glass.
		f	concrete, cast stone	Including kerbs
		g	clay	
		o	glass	
G	Large units (structural)	f	concrete	Precast concrete units, including reinforced
H	Sections, bars	i	timber	Timber sections and planks for suspended ground floors
H	Section, bars	n	plastics	Water bars, water stops
H	Sections, bars	h	metal	Metal reinforcement for concrete
J	Wire, mesh			Soil reinforcement, geogrids
K	Quilts	* j	organic fibres	Thermal insulation quilts or boards of plastics or fibres.
R	Rigid sheets	* m	inorganic fibres and particles	Void Formers
Y	Formless	* n	plastics (foamed)	
		* o	glass (foamed)	
L	Flexible sheets	* n	plastics	Damp proof membranes, barriers to water vapour and other gases or vapours. Basement tanking.
		* s	bitumen	
		* y	composites	
L	Flexible sheets	j	org fibre	Separating membranes
		m	inorg fibre	Geosynthetics (membranes and textiles)
		n	plastics	Drainage membranes
P	Thin coatings	n	polymeric	Liquid applied damp proofing compounds and barriers to water vapour and other gases or vapours. Basement tanking.
		s	bituminous	
R	Rigid sheets	i	timber	Flooring of fibre and particle board
R	Rigid sheets	i	metal	Trench sheeting
Y	Formless	q	concrete	Readymix concrete cast in situ
		(u	admixtures)	Concrete admixtures
Y	Formless	s	bituminous	Asphalt, tar Macadam, etc.
Y	Formless	p	aggregates, loose fill	Fills for ground work
Y	Formless	q	cement, binders	Products for pressure grounting and soil stabilisation
Y	Formless	t	fixing, jointing	Joint fillers and seals
X	Components	m	inorganic fibre	Band and wick drains
		n	plastics	
X	Components	*q	concrete	Steel or concrete prefabricated culverts.
		h	metal	

ANNEX 2

EXPLANATORY NOTE

The information given in the following tables constitutes the basis for the technical terms of reference for the mandate. In general it is expected that the products grouped together under a framed sub-heading will be covered by only one harmonised European standard. Within this one standard, however, certain products may have specific additional characteristics. These, where they exist, are identified in the table with additional code numbers preceded by "+".

All the characteristics identified in the list of this annex are supposed to result from the regulations of at least one Member State. They will have to be covered by the harmonised standards taking into account individual products and their intended uses. Characteristics listed in the Interpretative Documents (IDs) for which at present there is no evidence of existing regulations in Member States have not been included.

The characteristics are grouped according to the IDs under which they come. Each box in the tables represents one ID. In all lists the same terminology has been adopted for the characteristics. Although each list of characteristics relates to a group or family of products, not all characteristics apply to all products in the group. Which characteristics apply to which products and, in some cases, to which intended use are identified by the codes associated with the name of the family or of the single product.

Those characteristics directly related to the essential requirements (ERs) appear at the top of each table and are identified by their code number being in a shaded box. Certain other characteristics are not directly related to the ERs but are required to ensure, after handling and installation for example, the stated values of the characteristics made about the product. These appear lower in each box and do not have their code number shaded.

Durability of harmonised characteristics is required by article 3.1 of the CPD, even if not directly covered by existing National Regulations. Therefore the durability of relevant characteristics against specific actions is included at the bottom of each table and has to be covered (even if only with conventional values) by the harmonised standards. Nevertheless, no classes under article 3.2 and 6.3 (*regulatory classes*) are allowed.

A large part of the listed characteristics, for all or for specific uses, are not covered by the regulations of at least one country (no performance required). In this case the CE marking of the product need not necessarily state the values of these characteristics and if it does not do so, the product will be able to be used in those countries that do not require such characteristics.

The terminology used for the characteristics does not intend to give precise guidance on the parameter to be considered in the standard for a given product or test method. It is left to CEN/CENELEC to interpret the Commission requirements in respect of the implementation of, whenever possible, the horizontal approach. An example of this is thermal resistance. The standardisation bodies might express this aspect of performance as conductivity, resistance, density, etc, despite the indication of thermal resistance in the table. Concerning structural performances, both verification by calculation and by testing have been considered. When relevant, they should both be covered in the harmonised standard.

The lists do not detail the substances that have to be considered as dangerous in respect of the essential requirement "health and safety". The complexity of the national regulations require a significant effort to identify those substances that may cause undesirable health effects.
Annex IV of this mandate will indicate as soon as possible, those substances that have to be taken into account by CEN/CENELEC in the relevant product standards when the mandate identifies rate of release of dangerous substances. In this mandate dangerous substances are taken to mean those substances that cause unacceptable health effects relevant to the risks identified in ID 3.

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 1

PRODUCTS USED FOR FLOOR BEDS (INCLUDING SUSPENDED GROUND FLOORS), ROADS AND OTHER TRAFFICKED AREAS

Form	Materials	Title	Related charact.
X Prefabricated components	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Box culverts**	
		Characteristics covered by the harmonised standard will be:	
		mechanical strength as well as its **durability against corrosion and against freeze/thaw** *(only for exposed applications)*.	13, D7, D9
		Additional characteristics for specific materials:	
		- lightweight and autoclaved aerated concrete products **dry shrinkage** *(in end use conditions and only for LWC and AAC)*	+ 19b

---

⁻ LWC = Lightweight concrete AAC = Aerated autoclaved concrete

	Characteristics to be in the harmonised standards
11a	- Compressive strenght *(of concrete)*
11d	- Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage *(in end use conditions and only for LWC and AAC)* ⁻
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* ⁻
	- Reaction to fire *(only for synthetic aggregates and exposed applications)*
21a	* Euroclasses
	- Resistance to fire *(in the end use conditions)*:
22a	* loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	- Strength of fixture
47a	- Dimensioning
	- Acoustical insulation *(only when the product is intended also for acoustic applications)*
51b	* direct airborne sound insulation index
51e	* impact noise transmission index *(for floors)*
61a	- Thermal resistance *(only when the product is intended also for thermal applications)*
	- Durability of (11), (11d) and (13) against:
D2	* chemicals
D9	* corrosion
	- Durability of (11), (11a), (13), (33a) and (33b) against:
D7	* freeze-thaw *(only for exposed applications)*

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (2/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Box culverts	non structural		4
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 the "no performance determined" case, 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.

23

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR FOUNDATIONS AND RETAINING WALLS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".

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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/2-33

LIST OF PRODUCTS COVERED BY MANDATE 2/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
	FORM		MATERIALS	
F	Bricks, blocks	e	stone	Bricks and blocks of stone, clay, concrete
		f	concrete, cast stone	
		g	clay	
G	Large units	* f	precast concrete	Precast concrete units, including reinforced. Ground beams. Precast retaining walls. Diaphragm walling systems. Crib walling.
H	Sections and bars	h	metal	Steel bars, wire, or mesh reinforcement.
J	Wire, mesh			
K	Quilts	* j	organic fibres	Thermal insulation quilts or boards of plastics or fibres.
R	Rigid sheets	* m	inorganic fibres and particles	Void Formers
		* n	plastics (foamed)	
		* o	glass (foamed)	
L	Flexible sheets	n	plastics	Geosynthetics (membranes and textiles)
L	Flexible sheets	m	plastics	Damp proof membranes, barriers to water vapour and other gases or vapours. Basement tanking.
		s	bitumen	
		y	composites	
P	Thick coatings	n	polymeric	Liquid applied damp proofing compounds and barriers to water vapour and other gases or vapours. Basement tanking.
V	Thin coatings	q	cementitious	
		s	bituminous	
S	Rigid tiles	g	clay	Tanking tiles (with adhesive)
		q	concrete	
X	Components	q	concrete	Rock bolts, soil pins, ground anchors.
		h	metal	
Y	Formless	q	concrete	Readymix concrete cast in situ
		(u	admixtures)	Concrete admixtures

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 2

PRODUCTS USED FOR FOUNDATIONS AND RETAINING WALLS

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Retaining wall elements**	
		Characteristics covered by the harmonised standard will be:) **compressive strength** *(of concrete)*, **ultimate tensile and tensile yield strenght** *(of steel)*, **detailing, water tightness** *(of joints)*, **water vapour permeability** *(for external walls)* **as well as the durability of ultimate tensile and tensile yield against corrosion and the durability of compressive strenght, water tightness, water vapour permeability against freeze/thaw** *(only for exposed applications)*.	11a, 11d, 12b, 33a, 33d, D7, D9
		(In case of verification by testing) **loadbearing capacity as well as its durability against corrosion and freeze/thaw** *(only for exposed applications)*.	13
		(In case of verification by calculation) **mechanical strength as well as its durability against corrosion and freeze/thaw** *(only for exposed applications)*.	11
		Additional characteristics for specific materials:	
		- lightweight and autoclaved aerated concrete products **dry shrinkage** *(in end use conditions and only for LWC and AAC)*	+ 19b
		(in case of verification by calculation) **density** *(only for LWC and AAC)*	+ 19c

---

+ LWC = Lightweight concrete 'AAC = Aerated autoclaved concrete

	Characteristics to be in the harmonised standards
11a	- Compressive strenght *(of concrete)*
11d	- Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(in end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
21a	- Reaction to fire *(only for synthetic aggregates and exposed applications)* * Euroclasses
22a	- Resistance to fire *(in the end use conditions)*: * loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	- Strength of fixture
47a	- Dimensioning
51b	- Acoustical insulation *(only when the product is intended also for acoustic applications)* * direct airborne sound insulation index
51e	* impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
D2	- Durability of (11), (11d) and (13) against: * chemicals
D9	* corrosion
D7	- Durability of (11), (11a), (13), (33a) and (33b) against: * freeze-thaw *(only for exposed applications)*

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (1/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Retaining wall elements	Structural		2+

System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also any other characteristics covered by the technical terms of reference for the mandate.

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR PILE FOUNDATIONS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX I

CONSTRUCT 94/122/3-33

LIST OF PRODUCTS COVERED BY MANDATE 3/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS		
G	Large units	* f	precast concrete	Precast concrete piles, foundation supports.
H	Sections, bars	h	metal	Metal piles.
I	Tubes, pipes	i	timber	Timber piles.
I	Tubes, pipes	n	plastics	Sheating for piles
P	Thick coating	s	bituminous	
R	Rigid sheets	h	metal	Sheet piling.
R	Rigid sheets	j	organic fibre	Void former.
		m	inorganic fibre and particles	
		n	plastics (formed)	
Y	Formless	q	concrete	Readymix concrete cast in situ
X	Components	h	metal	Caissons

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 3

PRODUCTS USED FOR PILE FOUNDATIONS

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Foundation piles (normal concrete only)**	
		Characteristics covered by the harmonised standard will be:	
		compressive strength *(of concrete)*, **ultimate tensile and tensile yield strenght** *(of steel)*, **detailing, rigidity of joints as well as the durability of ultimate tensile and tensile yield against corrosion.**	11a, 11d, 12b, 18d, D9
		(In case of verification by testing) **loadbearing capacity as well as its durability against corrosion.**	13
		(In case of verification by calculation) **mechanical strength as well as itd durability against corrosion.**	11

~ LWC = Lightweight concrete AAC = Aerated autoclaved concrete

Characteristics to be in the harmonised standards	
11a 11d	- Compressive strenght *(of concrete)* - Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(in end use conditions and only for LWC and AAC)* ~
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* ~
21a	- Reaction to fire *(only for synthetic aggregates and exposed applications)* * Euroclasses
22a 22b 22c	- Resistance to fire *(in the end use conditions)*: * loadbearing capacity R *(only for loadbearing uses)* * integrity E * insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	- Strength of fixture
47a	- Dimensionig
51b 51e	- Acoustical insulation *(only when the product is intended also for acoustic applications)* * direct airborne sound insulation index * impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
D2 D9	- Durability of (11), (11d) and (13) against: * chemicals * corrosion
D7	- Durability of (11), (11a), (13), (33a) and (33b) against: * freeze-thaw *(only for exposed applications)*

Product family : **Precast normal/lightweight/autoclaved aerated concrete products (1/2)**

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Foundation piles	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also any other characteristics covered by the technical terms of reference for the mandate.

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR EXTERNAL WALLS (INCLUDING CLADDING), INTERNAL WALLS AND PARTITIONS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/4-33

LIST OF PRODUCTS COVERED BY MANDATE 4/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS		
F	Bricks, blocks	e	stone	Masonry - bricks and blocks of stone, clay, calcium silicate, gypsum, glass, cast stone, concrete (dense, cellular, lightweight, aac, no fines, breeze, clinker). Insulation filled, insulation faced blocks. Include special shapes eg. coping blocks.
		f	concrete, (cast stone)	
		g	clay	
		o	glass	
G	Large units	e	stone	Stone and concrete lintels, Copings.
		* f	precast concrete cast stone	
G	Large units	* f	precast concrete	Cladding panels, loadbearing wall elements and systems of precast concrete (inc. grc), profiled metal, timber composites, plastics (inc. grp), glass Curtain walling systems Patent glazing systems Insulated sandwich panels
		h	metal	
		i	timber	
		n	plastic	
		o	glass	
H J	Sections, bars Wire, mesh	h	metal	Metal reinforcement : bars, mesh, metal lathing. Bed joint reinforcement.
H	Sections, bars	h	metal	Framing for walling systems Timber frame walls Metal lintels, copings.
		i	timber	
K R Y	Quilts Rigid sheets Formless	* j	organic fibres	Thermal (and sound) insulation quilts, boards or loose fills of plastics or fibres. Laminated plastics insulation
		* o	glass (foamed)	
		* m	inorganic fibres and particles	
		* n	plastics (foamed)	
L	Flexible sheets	* m	plastics	Vapour barriers, checks Damp proof courses, membranes Flashings, copings, cavity trays. Gaskets and sealants
		* s	bitumen	
		* h	metal	
R	Rigid sheets	i	timber (plywood and fibre particle board)	Sheating and linings of plywood, fibre and particle board, plasterboard, insulated plasterboard, fibre reinforced sheets Partition systems, fixed and demountable Acoustic partition systems
		f	plasterboard	
		y	composites	
V	Thin coatings, impregnation	m	plastics	Liquid applied damp proofing compounds
		s	bitumen	
Y	Formless	q	concrete	Concrete cast in situ, readymix concrete, concrete admixtures
		(u	admixtures)	
Y	Formless	q	mortar	Cement for mortars, opc, hac, rapid hardening, sulphate resistant, masonry cement Mortar admixtures. Resin based mortars
		(u	admixtures)	
X	Components	m	plastics	Wall ties. Fixings. Support and restraint systems : channels and brackets, hangers, shelf angles, straps, wall extension profiles. Cavity closers. Ventilators.
		h	metal	

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 4

PRODUCTS USED FOR EXTERNAL WALLS (INCLUDING CLADDING), INTERNAL WALLS AND PARTITIONS

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Loadbearing wall elements**	

Characteristics covered by the harmonised standard will be:

Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing, water tightness** *(of joints)*, **water vapour permeability** *(for external walls)*, **water permeability** *(for external walls), (in end use conditions)* **resistance to fire R** *(only for loadbearing uses)*, **E and I, airborne sound insulation index** *(only when the product is intended also for acoustic applications)* as well as the **durability of compressive strenght, water tightness and water vapour permeability against freeze/thaw and the durability of ultimate tensile and tensile yield strength against corrosion.** — 11a, 11d, 12b, 22a, 22b, 22c, 33a, 33b, 33d, 51b, D7, D9

(In case of verification by testing) **loadbearing capacity as well as its durability against freeze/thaw** *(only for exposed applications)* **and corrosion.** — 13

(In case of verification by calculation) **mechanical strength as well as its durability against freeze/thaw** *(only for exposed applications)* **and corrosion.** — 11

Additional characteristics for specific materials:

- lightweight and autoclaved aerated concrete products — + 19b, 21a, 61a
  dry shrinkage *(in end use conditions and only for LWC and AAC)*, **reaction to fire** *(only for synthetic aggregates and exposed applications)* and **thermal resistance** *(only when claimed by the manufacturer)*

  (In case of verification by calculation) **density** *(only for LWC and AAC)* — + 19c

---

~ LWC = Lightweight concrete AAC = Aerated autoclaved

concrete

	Characteristics to be in the harmonised standards
11a	- Compressive strenght *(of concrete)*
11d	- Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage *(in end use conditions and only for LWC and AAC)* ~
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* ~
21a	- Reaction to fire *(only for synthetic aggregates and exposed applications)* * Euroclasses
22a	- Resistance to fire *(in the end use conditions)*: * loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	- Strength of fixture
47a	- Dimensioning
51b	- Acoustical insulation *(only when the product is intended also for acoustic applications)* * direct airborne sound insulation index
51e	* impact noise transmission index *(for floors)*
61a	- Thermal resistance *(only when the product is intended also for thermal applications)*
D2	- Durability of (11), (11d) and (13) against: * chemicals
D9	* corrosion
D7	- Durability of (11), (11a), (13), (33a) and (33b) against: * freeze-thaw *(only for exposed applications)*

41

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Cladding elements**	
		Characteristics covered by the harmonised standard will be:	
		loadbearing capacity, water tightness *(of joints)*, **water vapour permeability** *(for external walls)*, **water permeability** *(for external walls)*, **resistance to fire E and I** *(in end use conditions)*, **strenght of fixture, airborne sound insulation index** *(only when the product is intended also for acoustic applications)* as well as the **durability of loadbearing capacity, water tightness and water vapour permeability against freeze/thaw** and the **durability of loadbearing capacity against corrosion.**	13, 22b, 22c, 33a, 33b, 33d, 43e, 51b, D7, D9
		- lightweight and autoclaved aerated concrete products **drying shrinkage** *(in end use conditions and only for LWC and AAC)*, **density** *(only for LWC and AAC)* **reaction to fire** *(only for synthetic aggregates and exposed applications)* **and thermal resistance** *(only when the product is intended also for thermal applications)*	+ 19b, 19c, 21a, 61a

Product family : **Precast normal/lightweight/autoclaved aerated concrete products (1/2)**

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Loadbearing wall elements	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also the following characteristics covered by the technical terms of reference for the mandate:

- 11a **Compressive strength** *(of concrete)*
- 11d **Ultimate tensile and tensile yield strength** *(of steel)*
- 12b **Detailing**
- 22a **Resistance to fire**
- 33a **Water tightness** *(of joints)*
- 33b **Water vapour permeability** *(for external walls)*
- 33d **Water permeability** *(for external walls)*
- 19b **Drying shrinkage** *(if relevant)*
- 19c **Density** *(if relevant)*
- 21a **Reaction to fire** *(if relevant)*

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (2/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Cladding elements	non structural		4
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 the "no performance determined" case, 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.

51

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR FLOORS, GALLERIES, CEILINGS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

LIST OF PRODUCTS COVERED BY MANDATE 5/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS		
G	Large units (Structural)	* f	precast concrete	Precast concrete slabs and beams, including beam and block systems, prestressed or reinforced hollow core elements, ribbed floor elements, floor slats.
H	Sections, bars	h	metal	Wood wool slab decking.
		i	timber (inc glulam)	Reinforced concrete plank, pre-stressed concrete plank. Metal sections for structural support. Timber sections for structural support and planks for flooring.
K	Quilts	* j	org. fibres	Sound (and thermal) insulation quilts or boards of fibres or foamed plastics. Includes insulation laminated to rigid decking sheets.
R	Rigid sheets	* m	inorganic fibres and particles	
Y	Formless	* n	plastics (foamed)	
		* o	glass (foamed)	
R	Rigid sheets	h	metal	Metal decking.
		i	timber	Ply and particle/fibre board decking.
R	Rigid sheets	f	plaster-board	Plasterboard sheet for ceilings.
Y	Formless	q	concrete	Concrete cast in situ, readymix concrete, concrete admixtures.
		(u	admixtures)	

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 5

PRODUCTS USED FOR FLOORS, GALLERIES, CEILINGS

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Precast prestressed hollow core elements for floors**	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing,** *(in end use conditions)*, **resistance to fire R** *(only for loadbearing uses)*, *(only when the product is intended also for acoustic applications)* **airborne sound insulation index and impact noise transmission index** *(for floors)*	11a, 11d, 12b, 22a,, 51b, 51e
		(In case of verification by testing) **loadbearing capacity.**	13
		(In case of verification by calculation) **mechanical strength.**	11
		Additional characteristics for specific materials:	
		- lightweight and autoclaved aerated concrete products **dry shrinkage** *(in end use conditions and only for LWC and AAC)*, and **thermal resistance** *(only when the product is intended also for thermal applications)*	+ 19b, 61a
		(in case of verification by calculation) **density** *(only for LWC and AAC)*	+ 19c

---

+ LWC = Lightweight concrete AAC = Aerated autoclaved

	Characteristics to be in the harmonised standards
11a	- Compressive strenght *(of concrete)*
11d	- Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage *(in end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
	- Reaction to fire *(only for synthetic aggregates and exposed applications)*
21a	* Euroclasses
	- Resistance to fire *(in the end use conditions)*:
22a	* loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	Strength of fixture
47a	- Dimensioning
	- Acoustical insulation *(only when the product is intended also for acoustic applications)*
51b	* direct airborne sound insulation index
51e	* impact noise transmission index *(for floors)*
61a	- Thermal resistance *(only when the product is intended also for thermal applications)*
	- Durability of (11), (11d) and (13) against:
D2	* chemicals
D9	* corrosion
	- Durability of (11), (11a), (13), (33a) and (33b) against:
D7	* freeze-thaw *(only for exposed applications)*

Form	Materials	Title	
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Shuttering slabs lattice girder elements for floors**	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete),* **ultimate tensile and tensile yield strength** *(of steel),* **detailing,** *(in end use conditions),* **resistance to fire R** *(only for loadbearing uses), (only when the product is intended also for acoustic applications)* **airborne sound insulation index and impact noise transmission index** *(for floors)*	11a, 11d, 12b, 22a, 51b, 51e
		(In case of verification by testing) **loadbearing capacity.**	13
		(In case of verification by calculation) **mechanical strength.**	11

57

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST CONCRETE PRODUCTS: Ribbed floor elements**	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing, reaction to fire** *(only for synthetic aggregates and exposed applications)*, **resistance to fire R** *(only for loadbearing uses)* and	11a, 11d, 12b, 22a
		(In case of verification by testing) **loadbearing capacity.**	13
		(In case of verification by calculation) **mechanical strength.**	11

Product family : **Precast normal/lightweight/autoclaved aerated concrete products (1/2)**

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Prestressed hollow core elements for floors	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also the following characteristics covered by the technical terms of reference for the mandate:

- 11a **Compressive strength** *(of concrete)*
- 11d **Ultimate tensile and tensile yield strength** *(of steel)*
- 12b **Detailing**
- 22a **Resistance to fire** (R)
- 19b **Drying shrinkage** *(if relevant)*
- 19c **Density** *(if relevant)*

Product family : **Precast normal/lightweight/autoclaved aerated concrete products (1/2)**

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Shuttering slabs lattice girder elements for floors	Structural		2+

System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also the following characteristics covered by the technical terms of reference for the mandate:

- 11a **Compressive strength** *(of concrete)*
- 11d **Ultimate tensile and tensile yield strength** *(of steel)*
- 12b **Detailing**
- 22a **Resistance to fire** (R)

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (1/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Beam/block floor units and elements	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also the following characteristics covered by the technical terms of reference for the mandate:

- 11a **Compressive strength** *(of concrete)*
- 11d **Ultimate tensile and tensile yield strength** *(of steel)*
- 12b **Detailing**
- 22a **Resistance to fire** (R)
- 19b **Drying shrinkage** *(if relevant)*
- 19c **Density** *(if relevant)*

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (1/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Ribbed floor elements	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also the following characteristics covered by the technical terms of reference for the mandate:

- 11a **Compressive strength** *(of concrete)*
- 11d **Ultimate tensile and tensile yield strength** *(of steel)*
- 12b **Detailing**
- 22a **Resistance to fire** (R)

69

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR PREFABRICATED SYSTEMS FOR FLOORS AND GALLERIES, STAIRS, RAMPS, RAISED ACCESS FLOORS, BALUSTRADES AND HAND RAILS, INCLUDING EXTERNAL WORKS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/6-33

LIST OF PRODUCTS COVERED BY MANDATE 6/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS		
X	Prefabricated components	* f	concrete	Raised access floor systems
		h	metal	
		i	timber	Prefabricated stairs - straight, curved and spiral.
		n	plastics & rubber	Open riser stairs.
		o	glass	Fire safety escape stairs.
				Galleries and walkways.
				Fixed steps and ladders.
				Access ladders.
				Retractable loft ladders.
				Prefabricated ramps.
				Balustrades and guard rails.
				Hand rails.
				Balcony guard rails

Mandate 6: PREFABRICATED SYSTEMS FOR FLOORS AND GALLERIES, STAIRS, RAMPS, RAISED ACCESS FLOORS, BALUSTRATES AND HAND RAILS, INCLUDING EXTERNAL WORKS. 9 September, 1994

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 6

PRODUCTS USED FOR PREFABRICATED SYSTEMS FOR FLOORS AND GALLERIES, STAIRS, RAMPS, RAISED ACCESS FLOORS, BALUSTRATES AND HAND RAILS, INCLUDING EXTERNAL WORKS

Form	Materials	Title	Related charact.
X Prefabricated units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Stairs**	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing, resistance to fire R** *(only for loadbearing uses)*, **dimensioning,** *(only when the product is intended also for acoustic applications)* **impact noise transmission index** *(for floors)* **as well as the durability of ultimate tensile and tensile yield strength against corrosion and**	11a, 11d, 12b, 22a, 47a, 51e, D9
		(In case of verification by testing) **loadbearing capacity as well as its durability against corrosion.**	13
		(In case of verification by calculation) **mechanical strength as well as its durability against corrosion.**	11
		Additional characteristics for specific uses: - Part of fire compartment resistance to fire E and I *(in end use conditions)*	22b, 22c

	harmonised standards
11a 11d	- Compressive strenght *(of concrete)* - Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(In end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
	- Reaction to fire *(only for synthetic aggregates and exposed applications)*
21a	* Euroclasses
	- Resistance to fire *(In the end use conditions)*:
22a	* loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	Strength of fixture
47a	- Dimensioning
	- Acoustical insulation *(only when the product is intended also for acoustic applications)*
51b	* direct airborne sound insulation index
51e	* impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
	- Durability of (11), (11d) and (13) against:
D2	* chemicals
D9	* corrosion
	- Durability of (11), (11a), (13), (33a) and (33b) against:
D7	* freeze-thaw *(only for exposed applications)*

ANNEX 3

Product family : **Precast normal/lightweight/autoclaved aerated concrete products (1/2)**

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Stairs	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also the following characteristics covered by the technical terms of reference for the mandate:

- 11a **Compressive strength** *(of concrete)*
- 11d **Ultimate tensile and tensile yield strength** *(of steel)*
- 12b **Detailing**
- 22a, b and c **Resistance to fire**

75

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR ROOFS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/7-33

LIST OF PRODUCTS COVERED BY MANDATE 7/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS		
G	Large units (Structural)	*f	precast concrete	Prefabricated structural units of precast concrete (dense, cellular, lightweight, AAC), aluminium, steel, or timber e.g. trusses
		h	metal	
		i	timber	
H	Sections, bars	h	metal	Roof frame (also see mandate 28/02 "Frame")
		i	timber	Fascias and soffit boards
		q	concrete	
K	Quilts	* j	organic fibres	Thermal insulation quilts, boards, or loose fills of plastics fibres
R	Rigid sheets	* m	inorganic fibres and particles	
		* o	glass (foamed)	
Y	Formless	* n	plastics (foamed)	
L	Flexible sheets	* m	plastics	Vapour barriers, checks
		* s	bitumen	Underlays. Sarking felts.
R	Rigid sheets	h	metal	Roof decking of metal, timber, ply, fibreboard, particle board, woodwool slab
		i	wood	
		j	org fibre	Patent glazing
		o	glass (foamed)	
X	Components		Various ancillary products	Ventilators, components for drainage systems, components for roof outlets, etc. Access systems and walkways Safety hooks
Y	Formless	q	concrete	Readymix concrete cast in situ
		(u	admixtures)	Concrete admixtures

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 7

PRODUCTS USED FOR ROOFS

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Roof elements**	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing,** *(in end use conditions)*, **resistance to fire R** *(only for loadbearing uses)*, **E and I,** *(only when the product is intended also for acoustic applications)* **airborne sound insulation index as well as the durability of ultimate tensile and tensile yield strength against corrosion and of compressive strenght against freeze-thaw** *(only for exposed applications)* and	11a, 11d, 12b, 22a, 22b, 22c, 51b, D7, D9
		(In case of verification by testing) **loadbearing capacity as well as its durability against corrosion and freeze/thaw** *(only for exposed applications)*.	13
		(In case of verification by calculation) **mechanical strength as well as its durability against corrosion and freeze/thaw** *(only for exposed applications)*.	11
		Additional characteristics for specific materials:	
		- lightweight and autoclaved aerated concrete products **dry shrinkage** *(in end use conditions and only for LWC and AAC)*, **reaction to fire** *(only for synthetic aggregates and exposed applications)* **and thermal resistance** *(only when the product is intended also for thermal applications)*	+ 19b, 21a, 61a
		(in case of verification by calculation) **density** *(only for LWC and AAC)*	+ 19c

---

+ LWC = Lightweight concrete AAC = Aerated autoclaved concrete)

	harmonised standards
11a	- Compressive strenght *(of concrete)*
11d	- Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(in end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
21a	- Reaction to fire *(only for synthetic aggregates and exposed applications)* * Euroclasses
22a	- Resistance to fire *(in the end use conditions)*: * loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43c	Strength of fixture
47a	- Dimensioning
51b	- Acoustical insulation *(only when the product is intended also for acoustic applications)* * direct airborne sound insulation index
51c	* impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
D2	- Durability of (11), (11d) and (13) against: * chemicals
D9	* corrosion
D7	- Durability of (11), (11a), (13), (33a) and (33b) against: * freeze-thaw *(only for exposed applications)*

Product family : **Precast normal/lightweight/autoclaved aerated concrete products (1/2)**

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Roof elements	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also the following characteristics covered by the technical terms of reference for the mandate:

- 11a **Compressive strength** *(of concrete)*
- 11d **Ultimate tensile and tensile yield strength** *(of steel)*
- 12b **Detailing**
- 19b **Drying shrinkage** *(if relevant)*
- 19c **Density** *(if relevant)*
- 21a **Reaction to fire** *(only for synthetic aggregates and exposed application*
- 22a **Resistance to fire** (R)

89

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR FRAME (INCLUDING CHIMNEYS AND SHAFTS)

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/8-33

LIST OF PRODUCTS COVERED BY MANDATE 8/33

FAMILIES OF PRODUCTS				PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
	FORM		MATERIALS	
G	Large units	* f	precast concrete	Components for precast concrete frames Precast concrete ground beams
H I	Sections, bars Tubes	h i	metal timber	Components for steel, aluminium and timber frames
H J	Sections, bars Wires, mesh	f	precast concrete	Reinforcement for concrete frames Prestressing systems, post tensioning systems
X	Components		mainly : f precast concrete h metal i timber (including glulam)	Modular parts of frames e.g. lattice beams, box beams, trussed rafters. Ancillary products: e.g. tube clamps, cast in fixings for concrete, structural bearings, joist hangers, wall straps, holding down straps, truss clips etc. Prefabricated structures e.g. bridges, footbridges, pylons
X	Components		various	Fire protective cladding for beams and columns
Y	Formless	q m	cement inorganic fibres and particles	Sprayed coatings for fire protection
Specific products for chimneys and flues :				
I H	Pipes Sections	g f h	clay concrete metal	Precast sections for concrete chimneys. Preformed sections for metal chimneys. Concrete and refractory flue liners. Steel and vitreous enamel liners. Flexible stainless steel liners. Twin or triple wall flues. Flues with insulated casings. Prefabricated flues and chimneys
F	Blocks	g f	clay concrete	Flue and chimney blocks/bricks Block and liner systems Concrete monoblock flue systems
X	Components	g f h	clay concrete metal	Flue terminals e.g. cowls, pots, ridge terminals Chimney fans Balanced flue devices
Y	Formless	q	cement	Pumped concrete or refractory. flues

ANNEX 2

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 8

PRODUCTS USED FOR FRAME (INCLUDING CHIMNEYS AND SHAFTS)

Form	Materials	Title	Related charact.
G Large units	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Linear structural elements** (only normal concrete)	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing,** *(in end use conditions)*, **resistance to fire R** *(only for loadbearing uses)* as well as the **durability of ultimate tensile and tensile yield strength against corrosion and**	11a, 11d, 12b, 22a, D9
		(In case of verification by testing) **loadbearing capacity** as well as its **durability against corrosion.**	13
		(In case of verification by calculation) **mechanical strength** as well as its **durability against corrosion.**	11

LWC = Lightweight concrete AAC = Aerated autoclaved concrete)

Form	Materials	Title	Related charact.
X Components	f precast concrete	**PRECAST CONCRETE PRODUCTS: Bridge deck elements** (only normal concrete)	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing,** *(in end use conditions)*, **resistance to fire R** *(only for loadbearing uses)* **as well as the durability of ultimate tensile and tensile yield strength against corrosion and of compressive strenght against freeze-thaw**	11a, 11d, 12b, 22a, D7, D9
		(In case of verification by testing) **loadbearing capacity** as well as its **durability against corrosion.**	13
		(In case of verification by calculation) **mechanical strength** as well as its **durability against corrosion.**	11

ANNEX 3

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (1/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Linear structural elements	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also any other characteristics covered by the technical terms of reference for the mandate.

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (1/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Bridge deck elements	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also any other characteristics covered by the technical terms of reference for the mandate.

165

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR SUPPLY OF ELECTRICITY

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/24-33

LIST OF PRODUCTS COVERED BY MANDATE 24/33

FAMILIES OF PRODUCTS			PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS	
X Components	* f	precast concrete	Masts and posts
	g	clay (ceramics)	Intake and distribution:
	h	metal	circuit breakers, switch gear, meters, distribution boards
	n	rubber/plastics	
	o	glass	
	t	soldering	Trunking conduit:
	o	glass	trunking systems and trays, conduit and boxes, trunking under floor, ceiling, skirting, exterior.
	t	soldering	
			Wiring systems:
			electric cables, fire protection systems for cables, packaged wiring systems, cable support components. busbar systems
			Accessories:
			junction boxes, plugs, adaptors, power outlets, cooker controls, shower points, lighting outlet and switches dimmers.
			Emergency power supply for emergency services e.g. fire safety.
			Power supply to highways: lighting, traffic lights, lane management, signals, variable message devices, traffic detectors, monitoring equipment, transmission equipment.
			High voltage e.g. transmission power systems
			Penetration seals.

ANNEX 2

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 24

PRODUCTS USED FOR THE SUPPLY OF ELECTRICITY

Form	Materials	Title	Related charact.
X Prefabricated components	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Masts and posts**	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing,** *(in end use conditions)*, **resistance to fire R** *(only for loadbearing uses)* **as well as the durability of ultimate tensile and tensile yield strength against corrosion and of compressive strenght against freeze-thaw**	11a, 11d, 12b, 22a, D7, D9
		(In case of verification by testing) **loadbearing capacity as well as its durability against corrosion and freeze/thaw** *(only for exposed applications)*.	13
		(In case of verification by calculation) **mechanical strength as well as its durability against corrosion and freeze/thaw** *(only for exposed applications)*.	11

+ LWC = Lightweight concrete AAC = Aerated autoclaved concrete)

Characteristics to be in the harmonised standards	
11a	- Compressive strenght *(of concrete)*
11d	- Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(in end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
	- Reaction to fire *(only for synthetic aggregates and exposed applications)*
21a	* Euroclasses
	- Resistance to fire *(in the end use conditions)*:
22a	* loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	Strength of fixture
47a	- Dimensioning
	- Acoustical insulation *(only when the product is intended also for acoustic applications)*
51b	* direct airborne sound insulation index
51c	* impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
	- Durability of (11), (11d) and (13) against:
D2	* chemicals
D9	* corrosion
	- Durability of (11), (11a), (13), (33a) and (33b) against:
D7	* freeze-thaw *(only for exposed applications)*

167

ANNEX 3

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (1/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Masts and posts	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also any other characteristics covered by the technical terms of reference for the mandate.

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

169

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR COMMUNICATIONS

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/26-33

LIST OF PRODUCTS COVERED BY MANDATE 26/33

FAMILIES OF PRODUCTS			PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS	
X	Components	* f precast concrete h metals n plastics o glass	Junction boxes and elements for telecommunications Communication systems in relation to fire warning and fire call Communication systems in relation to other dangers e.g.: - escape of flammable or noxious substances into air or water - entrapment in lifts - entrapment in cold rooms or strong rooms - malfunctioning of services equipment - isolation on highways in the event of breakdown highways. Systems include: Warning bells, buzzers, etc. Telephones and intercoms. Televisual systems. Radio links. Direct lines to central controls. Automatic call to emergency services. Recording , transmitting, monitoring systems. Clocks and time recorders. Cable and conduit communication services. Fire control systems. Transport and highway communication systems.

ANNEX 2

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 26

PRODUCTS USED FOR COMMUNICATIONS

Form	Materials	Title	Related charact.
X Prefabricated components	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Junction boxes for telecommunications**	
		Characteristics covered by the harmonised standard will be:	
		Loadbering capacity *(in case of verification by testing)*, **water tightness** *(of joints)* **as well as the durability of loadbering capacity against corrosion and of loadbering capacity and water tightness against freeze-thaw**	13, 33a, D7, D9

+ LWC = Lightweight concrete AAC = Aerated autoclaved concrete)

Characteristics to be in the harmonised standards	
11a 11d	- Compressive strenght *(of concrete)* - Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(In end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
	- Reaction to fire *(only for synthetic aggregates and exposed applications)*
21a	* Euroclasses
	- Resistance to fire *(In the end use conditions)*:
22a	* loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	Strength of fixture
47a	- Dimensioning
	- Acoustical insulation *(only when the product is intended also for acoustic applications)*
51b	* direct airborne sound insulation index
51c	* impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
	- Durability of (11), (11d) and (13) against:
D2	* chemicals
D9	* corrosion
	- Durability of (11), (11a), (13), (33a) and (33b) against:
D7	* freeze-thaw *(only for exposed applications)*

ANNEX 3

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (2/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Junction boxes for telecommunications	non structural		4
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 the "no performance determined" case, 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.

173

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR CIRCULATION FIXTURES

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/30-33

LIST OF PRODUCTS COVERED BY MANDATE 30/33

FAMILIES OF PRODUCTS			PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)
FORM		MATERIALS	
X Components	* f	precast concrete	Boundary fences
	h	metals	Emergency exit sign installation
	i	timber	Photoluminescent signs and markers
	n	plastics, rubber	Illuminated signs
	o	glass	
	o	aggragates, loose fills	Vertical road signs
			Marker posts, guiding beacons
			Traffic lights
			Variable message signs
			Reflective signs
			Road marking materials
			Studs and reflective surfaces
			Vehicle safety barriers
			Crash cushions
			Bridge parapets
			Anti-glare fencing
			Pedestrian safety barriers, fences, railings, gates, turnstiles
			Noise barriers.

ANNEX 2

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 30

PRODUCTS USED FOR CIRCULATION FIXTURES

Form	Materials	Title	Related charact.
X Prefabricated components	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Boundary fences**	
		Characteristics covered by the harmonised standard will be:	
		Loadbering capacity as well as its **durability against corrosion** and compressive **strenght against freeze-thaw**	13, D7, D9

+ LWC = Lightweight concrete AAC = Aerated autoclaved concrete)

	harmonised standards
11a	- Compressive strenght *(of concrete)*
11d	- Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(in end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
	- Reaction to fire *(only for synthetic aggregates and exposed applications)*
21a	* Euroclasses
	- Resistance to fire *(in the end use conditions)*:
22a	* loadbearing capacity R *(only for loadbearing uses)*
22b	* integrity E
22c	* insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e	Strength of fixture
47a	- Dimensioning
	- Acoustical insulation *(only when the product is intended also for acoustic applications)*
51b	* direct airborne sound insulation index
51e	* impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
	- Durability of (11), (11d) and (13) against:
D2	* chemicals
D9	* corrosion
	- Durability of (11), (11a), (13), (33a) and (33b) against:
D7	* freeze-thaw *(only for exposed applications)*

ANNEX 3

Product family : **Precast normal/lightweight/autoclaved aerated concrete products** (2/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Boundary fences	non structural		4
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 the "no performance determined" case, 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.

EUROPEAN COMMISSION
DIRECTORATE-GENERAL III
INDUSTRY
Industrial affairs II: Capital goods industries
Construction

177

Brussels, 7.09.1994

MANDATE TO CEN/CENELEC CONCERNING THE EXECUTION OF STANDARDISATION WORK ON CONSTRUCTION PRODUCTS INTENDED TO BE USED FOR STORAGE FIXTURES

A. DESCRIPTION OF SPECIFIC MANDATES

I. FOREWORD

This mandate details the scope of one 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".
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 :

.../...

For the remaining part of the text of this mandate, please refer to mandate 1/33 and replace the relevant annexes with the following pages.

ANNEX 1

CONSTRUCT 94/122/33-33

LIST OF PRODUCTS COVERED BY MANDATE 33/33

FAMILIES OF PRODUCTS			PRODUCTS FOR CONSIDERATION (INCLUDING PRODUCTS INTENDED TO BE INCORPORATED IN SYSTEMS / INSTALLATIONS)		
FORM		MATERIALS			
X	Components	* f precast concrete	Silos		
		g clay (ceramics)	Basins / sinks	of	Stainless steel
		h metals	Water closets		eneamelled steel
		n plastics / rubber & resins	Earth and chemical closets		Glazed porcelain,
			WC seats		fire clay or
			Cisterns		earthenware
			Urinals		Acrylics
			Baths & panels		Epoxys
			Bidets		Resin composites.
			Shower units / trays / panels		
			Communal washing troughs		
			Water fountains		
		h metals	Sanitary dispenser: container, incinerator or macerator		
		n plastics / rubber	Washroom accessories: grab/support rails soap trays, soap dispensers, paper towel dispensers, linen roller towels, hot air driers, toilet roll dispensers.		
Y	Formless	n plastics	Groutings and sealants for installation of sanitary products.		
		q cement			

TECHNICAL TERMS OF REFERENCE FOR THE MANDATE

Mandate 33

PRODUCTS USED FOR STORAGE FIXTURES

Form	Materials	Title	Related charact.
X Prefabricated components	f precast concrete	**PRECAST NORMAL / LIGHTWEIGHT / AUTOCLAVED AERATED CONCRETE PRODUCTS: Silos**	
		Characteristics covered by the harmonised standard will be:	
		Compressive strenght *(of concrete)*, **ultimate tensile and tensile yield strength** *(of steel)*, **detailing,** *(in end use conditions)*, **rigidity of joints, resistance to fire R** *(only for loadbearing uses)*, **water tighness** *(of joints)* as well as the **durability of ultimate tensile and tensile yield strength against corrosion and of compressive strenght and water tighness against freeze-thaw** and	11a, 18d, 11d, 12b, 22a, 33a, D7, D9
		(In case of verification by testing) **loadbearing capacity** as well as its **durability against corrosion and freeze/thaw** *(only for exposed applications)*.	13
		(In case of verification by calculation) **mechanical strength** as well as its **durability against corrosion and freeze/thaw** *(only for exposed applications)*.	11

+ LWC = Lightweight concrete AAC = Aerated autoclaved concrete

	Characteristics to be in the harmonised standards
11a 11d	- Compressive strenght *(of concrete)* - Ultimate tensile and tensile yield *(of steel)*
12b	- Detailing
18d	- Rigidity of joints
19b	- Drying shrinkage*(in end use conditions and only for LWC and AAC)* +
	(In case of verification by testing)
13	- Loadbearing capacity
	(In case of verification by calculation)
11	- Strength, *expressed in terms of:* bending, tension, compression, shear, torsion or punching shear strength, *as relevant*
19c	- Density *(only for LWC and AAC)* +
21a	- Reaction to fire *(only for synthetic aggregates and exposed applications)* * Euroclasses
22a 22b 22c	- Resistance to fire *(in the end use conditions)*: * loadbearing capacity R *(only for loadbearing uses)* * integrity E * insulation I
33a	- Water tightness *(of joints)*
33b	- Water vapour permeability *(for external walls)*
33d	- Water permeability *(for external walls)*
43e 47a	Strength of fixture - Dimensioning
51b 51e	- Acoustical insulation *(only when the product is intended also for acoustic applications)* * direct airborne sound insulation index * impact noise transmission index *(for floors)*
61a	- Thermal resistance*(only when the product is intended also for thermal applications)*
D2 D9	- Durability of (11), (11d) and (13) against: * chemicals * corrosion
D7	- Durability of (11), (11a), (13), (33a) and (33b) against: * freeze-thaw *(only for exposed applications)*

ANNEX 3

Product family : Precast normal/lightweight/autoclaved aerated concrete products (1/2)

1. Levels and classes for product performances

1.1 For the time being, the differences specified in Article 3 (2) of the CPD, do not seem to give rise to the need of a classification system for products.

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/CENELEC to make the appropriate proposal through a modification to this mandate.

2. Systems of attestation of conformity

2.1 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	Attestation of conformity system
Silos	Structural		2+
System 2+ : See DPC Annex III.2.(ii), First possibility, including certification of the factory production control by an approved body			

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 the "no performance determined" case, 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 the certification of the factory production control only parameters related to the following characteristics shall be of the interest of the approved body:

(In case of verification by testing)

- 13 **Loadbearing capacity**

(In case of verification by calculation)

- 11 **Strength** *expressed in terms of:* **bending, tension, compression, shear, torsion or punching shear,** *as relevant.*

The initial inspection of the factory production control shall cover also any other characteristics covered by the technical terms of reference for the mandate.