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A Guide to the EU Construction Products Directive

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A Guide to the Construction Products Directive

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The Directive on Construction Products

Directive 89/106/EEC

of 21 December, 1988

To be considered:

a. The Directive on Construction Products is different from all other New Approach Directives (See NIST SP 951, Page 1) in that it deals not with a single family of products or with a single category of risk, but with multiple families of products and multiple types of risk.

b. Furthermore, the Directive deals with products as they perform when incorporated into complex structures; and it deals with the structures as well. It is far more complex than other New Approach Directives.

c. On the other hand, it offers the manufacturer more than one technical path to compliance. For example, the use of European Harmonized Standards (See NIST SP 951, Page 10) is complemented by other technical solution possibilities, such as European Technical Approvals (ETAs). (See page 6).

d. It is important to note that the Essential Requirements of the Directive apply to construction works, not to construction products. The Directive, however, requires products to perform in such a way as to permit the works to meet the Essential Requirements.

e. The Construction Products Directive differs from other New Approach Directives in that it calls for Interpretative Documents to lead the way from Essential Requirements to technical specifications (See page 4).

f. In other New Approach Directives, Conformity Assessment Procedures for a single family of products are organized into modules (See NIST SP 951, Page 4), and called out directly in the Directives. Since the CPD covers more than one family of products, it deals with Conformity Assessment Procedures by placing them in relevant Commission mandates and technical specifications.

g. The CPD gives Member States certain specific responsibilities. For example, Member States are involved in the preparation of Interpretative Documents (See page 4) upon which technical specifications and approvals will be based. Member States can determine levels of safety of building and civil engineering works and aspects of durability and economy of works within their territories. Member States are also involved in the development and implementation of the Eurocodes Program (See page 14).

Note: Member States may not regulate works in any way that differentiates from the Directive, or impose any essential requirements other than those in the Directive.

h. The manufacturer should be aware that the Construction Products Directive may have overlapping requirements with other Directives (e.g. the Lift Directive, the Low Voltage Directive, the Machinery Directive, and the Workplace Directive).

Purpose of the Construction Products Directive

The purpose of the Construction Products Directive is to ensure that building and civil engineering works do not endanger the safety of persons, domestic animals, and property. Furthermore, the Directive's aim is to ensure that products destined for permanent incorporation into a building or a civil engineering work (such as a bridge) are fit for use; that is, they will perform in such a way as to make the construction safe.

I. Scope

This Directive applies to any product that will be permanently incorporated into buildings and civil engineering construction works. Products include materials and elements and components (single or in a kit) of prefabricated systems or installations.

This Directive also applies to “minor part products”, or products which “play a minor part with respect to health and safety” (See page 11).

II. Essential Requirements (See Annex I page 27)

The Essential Requirements (See NIST SP 951, Page 3) are contained in Annex I of the Directive. They apply to the construction work as a whole and compliance with these requirements is mandatory. The Essential Requirements of the Construction Products Directive are organized into the following categories:

1. Mechanical resistance and stability

The construction works must be designed and built in such a way that loadings acting on it will not lead to:

- (a) collapse of the whole or part of the work;
- (b) major deformations;
- (c) damage to other parts of the works;
- (d) damage by an event to an extent disproportionate to the original cause.

2. Safety in case of fire

The construction works must be designed and built in such a way that in the event of a fire:

- (a) the load-bearing capacity of the construction can be assumed for a specific period of time;
- (b) the generation and spread of fire and smoke within the works are limited;
- (c) the spread of the fire to neighboring construction works is limited;
- (d) occupants can leave the works or be rescued by other means;
- (e) the safety of rescue teams is taken into consideration.

3. Hygiene, health and the environment

The construction work must be designed and built in such a way that it will not be a threat to the hygiene or health of the occupants or neighbors as a result of the presence of any of the following:

- (a) toxic gas,
- (b) dangerous particles or gases in the air,
- (c) dangerous radiation,
- (d) pollution or poisoning of the water or soil,
- (e) faulty elimination of waste water, smoke, solid or liquid wastes,
- (f) damp in parts of the works or on surfaces within the works.

4. Safety in use

The construction work must be designed and built in such a way that it does not present unacceptable risks of accidents such as slipping, falling, collision, burns, electrocution, or injury from explosion.

5. Protection against noise

The construction works must be designed and built in such a way that noise is kept down to a level that will not threaten the health of the occupants and will allow them to sleep, rest and work in satisfactory conditions.

6. Energy economy and heat retention

The construction works and its heating, cooling and ventilation installations must be designed and built in such a way that the amount of energy required in use shall be low, having regard to the climatic conditions of the location and the occupants.

To the builder: Note that one, some, or all of these requirements may apply to the construction in question.

III. The Technical Route to Compliance: Interpretative Documents, Standardization, and Technical Approvals

A. Interpretative Documents

Before Harmonized Standards or other technical specifications can be developed and before European Technical Approval Guidelines can be written, the Commission must issue documents that give “concrete form” to each Essential Requirement. These are the Interpretative Documents.

Interpretative Documents (IDs)¹, which are the links between Essential Requirements and mandated technical specifications, provide:

- Harmonized terminology;
- Classes or levels for each Essential Requirement;
- Methods of correlation between classes or levels and the technical specifications;
- and
- A reference for the development of Harmonized Standards and Guidelines for European Technical Approvals.

Interpretative Documents also provide a list of risks and risk analyses inherent to construction works. Example²: the risk of burns from contact with hot parts of the work or by spraying or immersion with hot liquids.

IDs also list performance criteria for works. Example: In most cases, the means to limit risk will be either to limit the opportunity for contact, or to limit the surface temperature of accessible parts of the temperatures of the fluids concerned, or to adopt a combination of these measures.

IDs provide a list of products or product families: Example: equipment for producing, distributing and recovering heat, for removing smoke and hot gases, as well as the various devices for monitoring, regulating, or limiting temperature; and characteristics for technical specifications for these products: Example: measurement of temperature levels which may be reached in normal, or normally predictable operation by active and non-active accessible parts, definition of accessibility of hot parts and test methods for this characteristic.

1. Classes

¹ ID No. 1: Mechanical resistance and stability; ID No. 2: Safety in case of fire; ID No. 3 Hygiene, health and the environment; ID No. 4: Safety in use; ID No. 5: Protection against noise; and ID No. 6: Energy economy and heat retention.

² From ID No. 4: Safety in use.

Classes relate to product performance and levels of protection that may prevail in national, regional or local territories. Classes may appear in Interpretative Documents, technical specifications, or in Commission Decisions.

Example: Taken from the Commission's Guidance Paper E³ on Classes and Levels:

Wall coverings (reaction to fire): Member State (1) requires wall coverings in hotel escape routes to be Euroclass A2 or better, whereas Member State (2) requires wall coverings in hotel escape routes to be Euroclass A1. Thus, class A2 products that are fit for use in hotel escape routes in the first Member State will not be considered fit for that same use in the second.

B. Standardization

The Construction Products Directive approaches standardization in a way that is different from other New Approach Directives (*See NIST SP 951, Page 2*). Performance requirements that apply to the construction as a whole and to individual components of the construction give the approach added complexity. This two-tiered approach to safety requires a two-tiered approach to the development of product standards. The first tier, via Interpretative Documents (*See page 4*), outlines the performance requirements of the buildings and works. Only after this is accomplished can the second tier, standards for individual products, be developed.

As in other New Approach Directives, Harmonized Standards for Construction Products (*See page 33*) provide a direct route to compliance, since they are guided by Interpretative Documents, are mandated by the Commission, and are developed by the European standards bodies CEN and CENELEC (*See NIST SP 951, Page 11*).

The Presumption of Conformity principle (*See NIST SP 951, Page 11*), however, has a different meaning in the Construction Products Directive. Whereas in other New Approach Directives the use of Harmonized Standards gives the manufacturer a presumption of conformity with the Essential Requirements, the Construction Products Directive's meaning of presumption of conformity is based on the *fitness of the product for its intended use* and relies far heavier on the use of harmonized technical specifications. This is because in the CPD, the Essential Requirements do not apply to products, but to the works into which they are incorporated. To the manufacturer, however, this distinction makes little difference. Harmonized Standards will give products the presumption of conformity with the law.

Harmonized Standards, along with ETAs (see next paragraph) and national standards, are also referred to in this Directive as technical specifications.

³ See <http://www.europa.eu.int/comm/enterprise/construction/internal/guidpap/guidpap.htm>

C. European Technical Approvals (See Annex II, page 28)

Where there are no Harmonized Standards, where there are no recognized existing national standards to build on, or where a product deviates significantly from Harmonized Standards, a manufacturer may apply for a European Technical Approval (ETA).

A European Technical Approval (ETA) for a construction product is a favorable technical assessment of its fitness for an intended use. ETAs are issued by the European Organization for Technical Approvals (EOTA),⁴ an organization of Member State Approval Bodies created by the Directive, and are valid for five years. This period may be extended. ETAs are based on examinations, tests, and an assessment based on relevant Interpretative Documents and ETA Guidelines. (ETAGs).

1. ETA Guidelines

A European Technical Approval Guideline (ETAG) is a document mandated by the Commission and drafted by and for the EOTA Approval Bodies with the help of technical experts from industry. Its purpose is to establish *how Approval Bodies should evaluate* the specific characteristics/requirements of a product or family of products.

ETAGs contain

- a list of the relevant Interpretative Documents,
- specific requirements for the products within the meaning of the Essential Requirements,
- the test procedures,
- method of assessing and judging the results of the tests,
- the inspection and conformity procedures,
- and the period of validity of the European Technical Approval.

In product areas where no ETAG exists, ETAs can still be awarded, subject to the agreement of all EOTA bodies and the European Commission, through what is known as the Common Understanding of Assessment Procedure⁵ (CUAP), in which the assessment criteria for the product and its intended use are set out. CUAPs are based on the Essential Requirements and intended for products which deviate from those which can conform to Harmonized Standards or which could be assessed with an ETAG.

Note: Although ETAs are an alternative to the “normal” route to compliance provided by Harmonized Standards and appropriate conformity assessment procedures, manufacturers should be aware that they are still based on common, or harmonized, technical decisions as they must have the approval of EOTA and consultation of the Directive’s Standing Committee, and they must be published by Member States in their respective official languages.

⁴ See the EOTA Web Site at <http://www.eota.be>

⁵ *ibid.*

IV. Conformity Assessment (See Annex III, page 29)

Conformity Assessment procedures depend on (a) the product; (b) the essential requirement(s); (c) the technical specification; and/or (d) what the Commission has mandated. This combination of elements of conformity assessment is called the Attestation of Conformity System.

A. Two Basic Types of Conformity Attestation: Certification and Declaration

The two basic types of conformity attestation are (1) certification by an approved body and (2) the manufacturer's declaration of conformity. Certification may be based on testing, certification, and/or inspection of the manufacturer's internal production control (quality management). This approach to conformity assessment (or conformity attestation) is the same as in other New Approach Directives. There is a difference, however. Initial type testing is called out in the Directive as a mandatory procedure that is only one element of a conformity attestation system for the product in question.

1. Initial Type Testing

Initial type testing is required in all conformity attestation systems. Depending on the product, initial type testing may be carried out by the manufacturer or a Notified Body (See NIST SP 951, Page 20 and page 10 of this document). Initial type testing is the carrying out of a complete set of tests or other procedures described in the harmonized technical specification that determines the performance of the product. An initial type test is not an assessment of the fitness for use of a product. It is the reference used for assessment.

Note: The attestation procedures for a product are found in Annex ZA.2 of the relevant standards and in Chapter 8 of ETAGs.

B. Attestation Systems and Tasks

Six systems of attestation are used under the CPD:

System 1+ Product conformity certification with audit testing.

System 1 Product conformity certification without audit testing.

System 2+ Factory production control (fpc) certification with continuous surveillance.

System 2 Factory production control (fpc) certification without surveillance.

System 3 Initial type testing.

System 4 Manufacturer's tasks only.

Table 1. Tasks For The Manufacturer And For The Attestation Body

System	Task for manufacturer	Task for attestation body	Basis for CE marking
4	Initial type testing of product Factory production control		Manufacturers Conformity Declaration
3	Factory production control	Initial type of testing of product	
2	Initial type of testing of product Factory production control	Certification of factory production control on basis of initial inspection	Manufacturers Conformity Declaration + Certification of factory production control
2+	Initial type testing of product Factory production control Testing of samples according prescribed test plan	Certification of factory production control on basis of Initial inspection Continuous surveillance, assessment and approval of production control	
1	Factory production control Further testing of samples according to prescribed test plan	Certification of product conformity on basis of tasks of the notified body and the tasks assigned to the manufacturer Tasks for notified body: - initial type-testing of the product; - initial inspection of factory and of factory production control; - continuous surveillance, assessment and approval of factory production control;	Manufacturers Conformity Declaration accompanied by Certificate of product conformity

1+	<p>Factory production control</p> <p>Further testing of samples according to prescribed test plan</p>	<p>Certification of product conformity on basis of tasks of the notified body and the tasks assigned to the manufacturer</p> <p>Tasks for notified body:</p> <ul style="list-style-type: none"> - initial type-testing of the product; - initial inspection of factory and of factory production control; - continuous surveillance, assessment and approval of factory production control; - audit-testing of samples taken at the factory, on the market or on the construction site 	
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Table taken from the Commission's Guidance Paper K on the Attestation of Conformity Systems (See <http://www.europa.eu.int/comm/enterprise/construction/internal/guidpap/guidpap.htm>)

C. Notified Bodies. What other New Approach Directives refer to as Notified Bodies are called, in the CPD, inspection bodies, testing laboratories, and certification bodies. The same principles that apply to Notified Bodies (*See NIST SP 951, Page 20*) apply to these. The CPD describes the functions that each type of body is competent and responsible to perform (*See Annex III, clause 3, page 31*).

V. CE Marking (See NIST SP 951, Page 17)

The CE Marking on a product means that the product complies with the relevant Harmonized Technical Specifications and that the appropriate system of attestation has been applied.

Harmonized Technical Specifications are:

**Harmonized European Standards;
A European Technical Approval; or
A National Standard recognized by the Commission as meeting the essential requirements of the CPD.⁶**

The Directive requires the CE Marking to be affixed to the product itself, on a label attached to it, on its packaging, or on the accompanying commercial documents (See Documentation, page 12)

The CE Marking must include the CE Symbol (See NIST SP 951, Page 17) and

The name or identifying mark of the producer;
and, where appropriate, characteristics of the product, where technical specifications so specify. This could include possible intended uses of the product and designated classes (*See Note below*);
The last two digits of the year of manufacture;
The identification symbol of the inspection body involved; and
The number of the EC Certificate of Conformity.

Note: Instructions for CE Marking are found in Annex ZA.3 of relevant product standards and in Chapter 8 of ETAGs. Example: If a product has been classified as A1 ("no contribution to fire"), then this class must be shown in the CE Marking.

The manufacturer must rely on the technical specification for instructions as to the information that should accompany the CE Marking.

Products playing a minor part⁷ with respect to health and safety do not have to bear the CE Marking, but they must be accompanied by a manufacturer's declaration of compliance with the "acknowledged rule of technology" (state of the art).

⁶ At the time of publication of this Guide, there were no national technical specifications that were recognized by the Commission.

⁷ At the time of publication of this Guide, The Commission had not published a list of these products.

Table 2. Example: CE Marking for a Thermal Insulation Product.

<p style="text-align: center;">CE</p> <p style="text-align: center;">0123</p>	<p><i>This example shows the CE marking applied to a thermal insulation product. For the purposes of this example, it is assumed that the information on the other characteristics is sufficiently identified by the reference to the European standard, e.g. through "generic values", or is not relevant to this intended use.</i></p>
<p style="text-align: center;">Any Co Ltd, P.O. Box 21, B - 1050</p> <p style="text-align: center;">99</p> <p style="text-align: center;">0123-CPD-001</p>	<p><i>This may not be the case in practice. Durability aspects are not covered here, although they may need to be, depending upon the state of the art.</i></p>
<p>EN 1234</p> <p>80mm Mineral wool for use in buildings</p> <p>Reaction to fire - Class B</p> <p>Thermal conductivity - 0.04 W/mK</p> <p>Flexural tensile strength - NPD</p>	

*Table Taken from the Commission's Guidance Paper D on CE Marking
(See <http://www.europa.eu.int/comm/enterprise/construction/internal/guidpap/guidpap.htm>)*

VI. Documentation: Certificate of Conformity and Declaration of Conformity (See Annex III, page 31)

Depending on the system of attestation, one or the other of these two documents will be mandatory. They must also be in the official language or languages (*Example: Belgium has two official languages: Dutch and French*) of the Member State in which the product is to be used.

A. Certificate of Conformity

The Certificate of Conformity, which is issued by an approved body, must include:

- Name and address of the certification body;
- Name and address of the manufacturer or his Authorized Representative (*See NIST SP 951, Page 23*);
- Description of the product (type, identification, use...);
- Provisions to which the product conforms; i.e., the EC legislation and the technical specification(s) to which the product conforms.
- Particular conditions applicable to the use of the product;
- Certificate number;
- Conditions and period of validity of the certificate where applicable,
- Name of, and position held by, the person empowered to sign the certificate.

B. Declaration of Conformity

The Declaration of Conformity, which is issued by the manufacturer, must include:

- Name and address of the manufacturer or his Authorized Representative
- Description of the product (type, identification, use...);
- Provision to which the product conforms;
- Particular conditions applicable to the use of the product;
- Name and address of the approval body, where applicable;
- Name of, and position held by, the person empowered to sign the declaration on behalf of the manufacturer or of his Authorized Representative.

Note: An outline of the manufacturer's declaration of conformity and for the certificate of product conformity (if relevant) is included in Annex ZA.3 of the relevant product standard or Chapter 8 of the ETAG.

The manufacturer should rely on the technical specification (See sentence above) for instructions as to the information that should be included in the Declaration of Conformity.

The CPD does not specify a time period for keeping the Declaration of Conformity or the Certificate of Conformity, but the manufacturer should keep the relevant documentation for at least 10 years, or for the length of time that is equal to the useful life of the product.

VII. The Safeguard Clause

The safeguard clause in New Approach Directives, including the Construction Products Directive, allows a Member State to challenge the right of free movement throughout the territory of a product governed by that Directive (*See NIST SP 951, Page 2*). A Member State can restrict or forbid the placing on the market of a product, or have a product withdrawn from the market if it ascertains that it presents a substantial hazard.

What Are Eurocodes?

Eurocodes are building codes for Europe. Like building codes in the United States, Eurocodes address design, performance, installation and safety technical requirements and include many standards. They are mandated by the Commission and developed by CEN (*See NIST SP 951 Page 10*). They are the technical expressions of Essential Requirements of the Construction Products Directive, are related directly to Interpretative Documents, and are endowed with the presumption of conformity.

They are used:

To design structural construction works (building and civil engineering works);

To check the conformity of works with Essential Requirement No.1 - mechanical resistance, including aspects of Essential Requirement No. 4 - safety in use, and a part of Essential requirement No. 2 - safety in case of fire, including durability, as defined in Annex 1 of the Construction Product Directive; and

To determine the performance of structural construction products.

Eurocodes take into consideration differences in geographical or climatic conditions and different levels of protection. They provide for choices in that they offer sets of values, classes, or alternative methods. Member States may choose their own levels of safety (within Eurocode parameters), which include aspects of durability and economy. Member State choices are called Nationally Determined Parameters.

Manufacturers, therefore, must understand what the Nationally Determined Parameters are for the territory in which the product is to be placed on the market, or in which the construction is to take place.

Harmonized Standards and European Technical Approvals for materials and constituent products may be referenced in Eurocodes, and vice versa. If no Harmonized Standards or European Technical Approvals exist, Eurocodes may give important information on the properties of materials and products, or they may reference existing national provisions of Member States.

Member countries of the EU are free to decide the legal status of the Eurocodes within their own territory. Adoption of the codes as part of national building regulations is optional, but countries are required to recognize structures built to the codes as having been adequately designed. The ultimate goal of Eurocodes is to replace the differing rules in the various Member States.

Text of the Directive on Construction Products (89/106/EEC)

The following text of the Directive on Construction Products has been taken from the digital version of the legislation issued in the Official Journal of the European Communities. Web Site: <http://www.newapproach.org>

Only European Community's legislation printed in the Official Journal of the European Communities is deemed to be authentic.

The Construction Products Directive (Council Directive 89/106/CE)

Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products.

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100a thereof,
Having regard to the proposal from the Commission (1),
In cooperation with the European Parliament (2),
Having regard to the opinion of the Economic and Social Committee (3),
Whereas Member States are responsible for ensuring that building and civil engineering works on their territory are designed and executed in a way that does not endanger the safety of persons, domestic animals and property, while respecting other essential requirements in the interests of general well-being;
Whereas Member States have provisions, including requirements, relating not only to building safety, but also to health, durability, energy economy, protection of the environment, aspects of economy, and other aspects important in the public interest;
Whereas these requirements, which are often the subject of national provisions laid down by law, regulation or administrative action, have a direct influence on the nature of construction products employed and are reflected in national product standards, technical approvals and other technical specifications and provisions which, by their disparity, hinder trade within the Community;
Whereas paragraph 71 of the White Paper on completing the internal market, approved by the European Council in June 1985,

states that, within the general policy, particular emphasis will be placed on certain sectors, including construction; whereas the removal of technical barriers in the construction field, to the extent that they cannot be removed by mutual recognition of equivalence among all the Member States, should follow the new approach set out in the Council resolution of 7 May 1985 (4) which calls for the definition of essential requirements on safety and other aspects which are important for the general well-being, without reducing the existing and justified levels of protection in the Member States;

Whereas the essential requirements constitute both the general and specific criteria with which construction works must comply; whereas such requirements are to be understood as requiring that the said works conform with an appropriate degree of reliability, With one, some or all of these requirements when and where this is laid down in regulations;

Whereas, as a basis for the harmonized standards or other technical specifications at European level and for the drawing up or granting of European technical approval, interpretative documents will be established in order to give concrete form to the essential requirements at a technical level;
Whereas these essential requirements provide the basis for the preparation of harmonized standards at European level for construction products; whereas, in order to

achieve the greatest possible advantage for a single internal market. to afford access to that market for as many manufacturers as possible, to ensure the greatest possible degree of market transparency and to create the conditions for a harmonized system of general rules in the construction industry, harmonized standards should be established as far as, and as quick as, possible; Whereas these standards are drawn up by private bodies and must remain non-mandatory texts; whereas, for that purpose, the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (Cenelec) are recognized as the competent bodies for the adoption of harmonized standards in accordance with the general guidelines for cooperation between the Commission and those two bodies signed on 13 November 1984; whereas, for the purposes of this Directive, a harmonized standard is a technical specification (European standard or harmonized document) adopted by, one or both of those bodies upon a mandate given by the Commission in accordance with the provisions of Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations (5); Whereas the special nature of construction products requires the precise formulation of these harmonized standards; whereas it is therefore necessary to draw up interpretative documents in order to establish links between mandates for standards and the essential requirements;

whereas harmonized standards, expressed as far as possible in terms of product performance, take account of these interpretative documents, which shall be drawn up in cooperation with the Member States;

Whereas performance levels and requirements to be fulfilled. by products in future in the Member States shall be laid down in classes in the interpretative documents and in the harmonized technical specifications in order to take account of different levels of essential requirements for certain works and of different conditions prevailing in the Member States;

Whereas harmonized standards should include classifications that allow construction products which 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;

Whereas a Product is Presumed fit for use if it conforms to a harmonized standard, a European technical approval or a non-harmonized technical specification recognized at Community level; whereas, in cases where products are of little importance with respect to the essential requirements and where they deviate from existing technical specifications, their fitness for use can be certified by recourse to an approved body;

Whereas products thus considered fit for use are easily recognizable by the EC mark; whereas they must be allowed free movement and free use for their intended purpose throughout the Community;

Whereas, in the case of products where European standards cannot be produced or foreseen within a reasonable period of time or of products which deviate substantially from a standard, the fitness for use of such products may be proved by recourse to European technical approvals on the basis of common guidelines; whereas the common guidelines for the granting of European technical approvals will be adopted on the basis of the interpretative documents;

Whereas, in the absence of harmonized standards and European technical approvals, national or other non-harmonized technical specifications may be recognized as providing a suitable basis for a presumption that the essential requirements are met;

Whereas it is necessary to ensure the conformity of products with harmonized standards and with non-harmonized technical specifications recognized at European level by means of procedures of production control by manufacturers and of supervision, testing assessment and certification by independent qualified third parties, or by the manufacturer himself;

Whereas a special procedure should be provided as an interim measure for products where standards or technical approvals recognized at European level do not yet exist; whereas this procedure should facilitate recognition of the results of tests performed in another Member State according to the technical requirements of the Member State of destination;

Whereas a Standing Committee on Construction should be set up comprising experts designated by Member States to assist the Commission on questions arising from the implementation and practical application of this Directive;

Whereas the responsibility of Member States for safety, health and other matters covered by the essential requirements on their territory should be recognized in a safeguard clause providing for appropriate protective measures,

HAS ADOPTED THIS DIRECTIVE:

CHAPTER 1: Field of application - Definitions - Requirements - Technical specifications - Free movement of goods

Article 1

1. This Directive shall apply to construction products in so far as the essential requirements in respect of construction works under Article 3 (1) relate to them.

2. For the purposes of this Directive, 'construction product' means any product which is produced for incorporation in a permanent manner in construction works, including both buildings and civil engineering works.

'Construction products' are hereinafter referred to as 'products'; construction works including both buildings and civil engineering

works are hereinafter referred to as 'Works'.

Article 2

1. Member States shall take all necessary measures to ensure that the products referred to in Article 1, which are intended for use in works, may be placed on the market only if they are fit for this intended use, that is to say they have such characteristics that the works in which they are to be incorporated, assembled, applied or installed, can, if properly designed and built, satisfy the essential requirements referred to in Article 3 when and where such works are subject to regulations containing such requirements.

2. (a) When products are subject to other Directives with regard to other aspects and which also provide for the affixing of the CE conformity marking, referred to in Article 4 (2), the latter shall indicate that the products are also presumed to conform to the provisions of those other Directives.

(b) However, where one or more of these Directives allow the manufacturer, during a transitional period, to choose which arrangements to apply, the CE marking shall indicate conformity only to the Directives applied by the manufacturer. In this case, particulars of the Directives applied, as published in the Official Journal of the European Communities, must be given in the documents, notices or instructions required by the Directives and accompany such products.

3. When a future directive concerns mainly other aspects and only to a minor extent the essential requirements of this Directive, that subsequent directive shall contain provisions ensuring that it also covers the requirements of this Directive.

4. This Directive shall not affect the right of Member States to specify - with due observance of the provisions of the Treaty - the requirements they deem necessary to ensure that workers are protected when using products, provided it does not mean the products are modified in a way unspecified in this Directive.

Article 3

1. The essential requirements applicable to works which may influence the technical characteristics of a product are set out in terms of objectives in Annex I. One, some or all of these requirements may apply; they shall be satisfied during an economically reasonable working life.

2. In order to take account of possible differences in geographical or climatic conditions or in ways of life as well as different levels of protection that may prevail at national, regional or local level, each essential requirement may give rise to the establishment of classes in the documents referred to in paragraph 3 and the technical specifications referred to in Article 4 for the requirement to be respected.

3. The essential requirements shall be given concrete form in documents (interpretative documents) for the creation of the necessary links between the essential requirements laid down in paragraph 1 and the standardization mandates, mandates for guidelines for European technical approval or the recognition of other technical specifications within the meaning of Articles 4 and 5.

Article 4

1. Standards and technical approvals shall, for the purposes of this Directive, be referred to as 'technical specifications'.

For the purposes of this Directive, harmonized standards shall be the technical specifications adopted by

CEN, Cenelec or both, on mandates given by the Commission in conformity with Directive 83/189/EEC on the basis of an opinion given by the Committee referred to in Article 19 and in accordance with the general provisions concerning cooperation between the Commission and these two bodies signed on 13 November 1984.

2. Member States shall presume that products are fit for use if they enable works in which they are employed, provided the latter are properly designed and built, to satisfy the essential requirements referred to in Article 3 where such products bear the CE marking indicating that they satisfy all the provisions of this Directive, including the conformity assessment procedures laid down in Chapter V and the procedure laid down in Chapter III. The CE marking shall indicate:

(a) that they comply with the relevant national standards transposing the harmonized standards, references to which have been published in the Official journal of the European Communities. Member States shall publish the references of these national standards;

(b) that they comply with a European technical approval, delivered according to the procedure of Chapter III, or

(c) that they comply with the national technical specifications referred to in paragraph 3 in as much as harmonized specifications do not exist; a list of these national specifications shall be drawn up according to the procedure in Article 5 (2).

3. Member States may communicate to the Commission the texts of their national technical specifications which they regard as complying with the essential requirements referred to in Article 3. The Commission shall forward these national technical specifications forthwith to the other Member States. In accordance with the procedure provided for in Article 5 (2), it shall notify the Member States of those national technical specifications in respect of which there is presumption of conformity with the essential requirements referred to in Article 3.

This procedure will be initiated and managed by the Commission in consultation with the committee referred to in Article 19.

Member States shall publish the references to these technical specifications. The Commission shall also publish them in the Official Journal of the European Communities.

4. Where a manufacturer, or his agent, established in the Community, has not applied, or has applied only in part, the existing technical specifications referred to in paragraph 2, which require, according to the criteria set out in Article 13 (4), the product to be submitted for a declaration of conformity as defined in Annex III (2) (ii), second and third possibilities, the corresponding decisions under Article 13 (4) and Annex III shall apply and such a product's fitness for use within the meaning of Article 2 (1) shall be established in accordance with the procedure set out in Annex III (2) (ii), second possibility..

5. The Commission, in consultation with the committee referred to in Article 19, shall draw up, manage and revise periodically a list of products which play a minor part with respect to health and safety, and in respect of which a declaration of compliance with the 'acknowledged rule of technology', issued by the manufacturer, will

authorize such products to be placed on the market.

6. The CE marking signifies that products satisfy the requirements of paragraphs 2 and 4 of this Article. It is for the manufacturer or his authorized representative established within the Community to take responsibility for affixing the CE marking on the product itself, on a label attached to it, on its packaging, or on the accompanying commercial documents.

The model of the CE Marking and conditions of its use are given in Annex III.

Products referred to in paragraph 5 shall not bear the CE Marking.

Article 5

1. Where a Member State or the Commission is of the opinion that the harmonized standards or European technical approvals referred to in Article 4 (2), points (a) and (b), or the mandates referred to in Chapter 11, do not satisfy the provisions of Articles 2 and 3, that Member State or the Commission shall notify the committee referred to in Article 19, setting out its reasons. The committee shall deliver an urgent opinion.

In the light of the opinion of the committee, and after consultation with the committee set up under Directive 83/189/EEC where it concerns harmonized standards, the Commission shall inform Member States if the standards or approvals concerned should be withdrawn in the publications referred to in Article 7 (3).

2. On reception of the communication referred to in Article 4 (3), the Commission shall consult the committee referred to in Article 19. In the light of the opinion of the committee, the Commission shall notify Member States whether the technical specification in question

should benefit, from the presumption of conformity and, if so, publish a reference to it in the Official Journal of the European Communities.

If the Commission or a Member State believes that a technical specification no longer fulfills the conditions necessary for presumption of conformity, with the provisions of Articles 2 and 3, the Commission shall consult the committee referred to in Article 19. In the light of the opinion of the said committee, the Commission shall notify the Member States whether the national technical specification in question should continue to benefit from presumption of conformity, and, if not, whether the reference to it referred to in Article 4 (3) should be withdrawn.

Article 6

1. Member States shall not impede the free movement, placing on the market or use in their territory of products which satisfy the provisions of this Directive.

Member States shall ensure that the use of such products, for the purpose for which they were intended, shall not be impeded by rules or conditions imposed by public bodies or private bodies acting as a public undertaking or acting as a public body on the basis of a monopoly position.

2. Member States shall, however, allow products not covered by Article 4 (2) to be placed on the market in their territory if they satisfy national provisions consistent with the Treaty until the European technical specifications referred to in Chapters II and III provide otherwise. The Commission and the committee referred to in Article 19 will monitor and review the development of the European technical specifications on a regular basis.

3. If the relevant European technical specifications, either themselves or on the basis of the interpretative documents referred to in Article 3 (3), distinguish between different classes corresponding to different performance levels, Member States may determine the performance levels also to be observed in their territory only within the classifications adopted at Community level and only subject to the use of all or some classes or one class.

CHAPTER II: Harmonized standards

Article 7

1. In order to ensure the quality of harmonized standards for products, the standards shall be established by the European standards organizations on the basis of mandates given by the Commission in accordance with the procedure laid down in Directive 83/189/EEC and, after consulting the committee referred to in Article 19, in accordance with the general provisions concerning cooperation between the Commission and these bodies signed on 13 November 1984.

2. The resulting standards shall be expressed as far as practicable in product performance terms, having regard to the interpretative documents.

3. Once the standards have been established by the European standards organizations, the Commission shall publish the references of the standards in the 'C' series of the Official Journal of the European Communities.

CHAPTER III: European technical approval

Article 8

1 . European technical approval is a favourable technical approval is a favourable technical assessment of the fitness for use of a product for an intended use, based on fulfillment of the essential requirements for building works for which the product is used.

2. European technical approval may be granted to.

(a) products for which there is neither a harmonized standard, nor a recognized national standard, nor a mandate for a harmonized standard, and for which the Commission, after consulting the committee referred to in Article 19, considers that a standard could not, or not yet, be elaborated; and

(b) products which differ significantly from harmonized or recognized national standards.

Even in the case where a mandate for a harmonized standard has been issued, the provisions referred to in (a) do not exclude the granting of European technical approval for products for which guidelines for such approval exist. This shall apply until the entry into force of the harmonized standard in the Member States.

3. In special cases, the Commission may, as a derogation from paragraph 2 (a), authorize the issue of European technical approval, after consulting the committee referred to in Article 19, for products for which there is a mandate for a harmonized standard, or for which the Commission has established that a harmonized standard can be elaborated. The authorization shall be valid for a fixed period.

4. European technical approval shall in general be issued for a five Year period. This period may be extended.

Article 9

1. European technical approval for a product shall be based on examinations, tests and an assessment on the basis of the interpretative documents referred to in Article 3 (3) and of the guidelines referred to in Article 11 for this product or the corresponding family of products.

2. Where guidelines referred to in Article 11 do not or not yet exist, European technical approval may be issued by reference to the relevant essential requirements and the interpretative documents where the assessment of the product is adopted by the approval bodies acting jointly in the organization referred to in Annex II. If the approval bodies cannot agree, the matter shall be referred to the committee referred to in Article 19.

3. The European technical approval for a product shall be issued in a Member State in accordance with the procedure laid down in Annex II at the request of the manufacturer or his agent established in the Community.

Article 10

1. Each Member State shall notify the other Member States and the Commission of the names and addresses of the bodies which it has authorized to issue European technical approvals.

2. The approval bodies must satisfy the requirements of this Directive and in particular must be able:

- to assess the fitness for use of new products on the basis of scientific and practical knowledge,
- to take impartial decisions in relation to the interests of the manufacturers concerned or their agents, and
- to collate the contributions of all the interested parties in a balanced assessment.

3. The list of approval bodies which are competent to issue European technical approvals, as well as any amendments to that list, shall be published in the 'C' series of the Official Journal of the European Communities.

Article 11

1. The Commission shall, after consulting the committee referred to in Article 19, issue mandates for establishing guidelines for European technical approval for a product or family of products to the organization of approval bodies designated by the Member States.

2. The guidelines for European technical approval for a product or family of products should contain the following, in particular:

(a) a list of the relevant interpretative documents referred to, in Article 3 (3);

(b) specific requirements for the products within the meaning of the essential requirements referred to in Article 3 (1);

(c) the test procedures;

(d) method of assessing and judging the results of the tests;

(e) the inspection and conformity procedures which must correspond to Articles 13, 14 and 15

(f) the period of validity of the European technical approval.

3. The guidelines for European technical approval shall, after consultation with the committee referred to in Article 19, be published by the Member States in their official language or languages.

CHAPTER IV: Interpretative documents

Article 12

1. The Commission shall, after consulting the committee referred to in Article 19, instruct technical committees in which the Member States participate to draw up the interpretative documents referred to in Article 3 (3).

2. The interpretative documents shall:

(a) give concrete form to the essential requirements laid down in Article 3 and in Annex 1 by harmonizing the terminology and the technical bases and indicating classes or levels for each requirement where necessary and where the state of scientific and technical knowledge so permits;

(b) indicate methods of correlating these classes or levels of requirement with the technical specifications referred to in Article 4, for example, methods of calculation and of proof, technical rules for project design, etc.;

(c) serve as a reference for the establishment of harmonized standards and guidelines for European technical approval and for recognition of national technical specifications in accordance with Article 4 (3).

3. The Commission shall publish the interpretative documents in the 'C' series of the Official Journal Of the European Communities after soliciting the opinion of the committee referred to in Article 19.

CHAPTER V: Attestation of conformity

Article 13

1. The manufacturer, or his agent established in the Community, shall be responsible for the attestation that products are in conformity with the requirements of a technical specification within the meaning of Article 4.

2. Products that are the subject of an attestation of conformity shall benefit from the presumption of conformity, with technical

specifications within the meaning of Article 4. Conformity shall be established by means of testing or other evidence on the basis of the technical specifications in accordance with Annex III.

3. The attestation of conformity of a product is dependent on:

(a) the manufacturer having a factory production control system to ensure that production conforms with the relevant technical specifications; or

(b) for particular products indicated in the relevant technical specifications, in addition to a factory production control system, an approved certification body being involved in assessment and surveillance of the production control or of the product itself.

4. The choice of the procedure within the meaning of paragraph 3 for a given product or family of products shall be specified by the Commission, after consultation of the committee referred to in Article 19, according to:

(a) the importance of the part played by the product with respect to the essential requirements, in particular those relating to health and safety .

(b) the nature of the product;

(c) the effect of the variability of the product's characteristics on its serviceability;

(d) the susceptibility to defects in the product manufacture;

in accordance with the particulars set out in Annex III.

in each case, the least onerous possible procedure consistent with safety shall be chosen.

The procedure thus determined shall be indicated in the mandates and in the technical specifications or in the publication thereof.

5. in the case of individual (and non-series) production, a declaration of conformity in accordance with Annex III (2) (ii), third possibility,, shall suffice, unless otherwise provided by the technical specifications for products which have particularly important implications for health and safety.

Article 14

1. In accordance with Annex III, the procedures described shall lead:

(a) in the case of Article 13 (3) (a), to the production of a declaration of conformity for a product by the manufacturer, or his agent established in the Community; or

(b) in the case of Article 13 (3) (b), to the issue by an approved certification body of a certificate of conformity for a system of production control and surveillance or for the product itself.

Detailed rules for the implementation of the procedures of attestation of conformity, are given in Annex III.

2. The manufacturer's declaration of conformity or the certificate of conformity shall entitle the manufacturer, or his agent established in the Community, to affix the corresponding CE Marking on the product itself, on a label attached to it, on its packaging or on the accompanying commercial documents. The model of the CE Marking and the rules for its use in respect of each of the procedures of attestation of conformity are given in Annex III.

Article 15

1. Member States shall ensure that the CE Marking is correctly used.

2. Without prejudice to Article 21: (a) where a Member State establishes that the CE marking has been affixed unduly, the manufacturer or his agent established within the Community shall be obliged to make the product conform as regards the provisions concerning the CE marking and to end the infringement under conditions imposed by the Member State; (b) where non-conformity continues, the Member State must take all appropriate measures to restrict or prohibit the placing on the market of the product in question or to ensure that it is withdrawn from the market in accordance with the procedures laid down in Article 21.

3. Member States shall take the measures necessary to prohibit the affixing to products or their packaging of markings which are likely to deceive third parties as to the meaning and form of the CE marking. Any other marking may be affixed to the construction products on a label fixed to the product packaging or on the accompanying commercial documents provided that the visibility and legibility of the CE marking is not thereby reduced.

CHAPTER VI: Special procedures

Article 16

1. In the absence of technical specifications, as defined in Article 4, for any given product, the Member State of destination shall, on request in individual cases, consider the product to be in conformity, with the national provisions in force if they have satisfied tests and inspections carried out by an approved body in the producing Member State according to the methods in force in the Member State of destination or

recognized as equivalent by that Member State.

2. The producing Member State shall inform the Member State of destination, in accordance with whose provisions the tests and inspections are to be carried out, of the body it intends to approve for this purpose. The Member State of destination and the producing Member State shall provide each other with all necessary information. On conclusion of this exchange of information the producing Member State shall approve the body, thus designated. If a Member State has misgivings, it shall substantiate its position and inform the Commission.

3. Member States shall ensure that the designated bodies afford one another all necessary assistance.

4. Where a Member State establishes that an approved body is not carrying out the tests and inspections properly in conformity with its national provisions, it shall notify the Member State in which the body is approved thereof. That Member State shall inform the notifying Member State within a reasonable time limit of what action has been taken. If the notifying Member State does not consider the action taken to be sufficient, it may prohibit the placing on the market and use of the product in question or make it subject to special conditions. It shall inform the other Member State and the Commission thereof.

Article 17

Member States of destination shall attach the same value to reports and attestations of conformity issued in the producing Member State in accordance with the procedure referred to in Article 16, as they, do to their own corresponding national documents.

CHAPTER VII: Approved bodies

Article 18

1. Member States shall notify the Commission and the other Member States of the certification and inspection bodies and the testing laboratories which they have designated for the tasks which must be carried out for the purposes of technical approval, certificates of conformity, inspections and tests, in accordance with this Directive, together with their names and addresses and the identification numbers assigned to them beforehand by the Commission. The Commission shall publish in the Official Journal of the European Communities a list of the notified bodies and laboratories with their identification numbers and the tasks and products for which they have been notified. The Commission shall ensure that this list is kept up to date.

2. Certification bodies, inspection bodies and testing laboratories shall comply with the criteria laid down in Annex IV.

3. Member States shall indicate the products which fall within the competence of the bodies and laboratories referred to in paragraph 1 and the nature of the tasks to be assigned to them.

CHAPTER VIII: Standing Committee on Construction

Article 19

1. A Standing Committee on Construction is hereby set up.

2. The committee shall be made up of representatives appointed by the Member States. It shall be chaired by a representative of the Commission. Each Member State shall appoint two representatives. The representatives may be accompanied by experts.

3. The committee shall draw up its own rules of procedure.

Article 20

1. The committee referred to in Article 19 may, at the request of its chair-man or a Member State, examine and question posed by the implementation and the practical application of this Directive.

2. The provisions necessary for:

(a) the establishment of classes of requirements in so far as they are not included in the interpretative documents and the establishment of the procedure for attesting conformity in mandates for standards pursuant to Article 7 (1) and guidelines for approvals pursuant to Article 11 (1);

(b) the giving of instructions for the drawing-up of interpretative documents pursuant to Article 12 (1) and decisions on interpretative documents pursuant to Article 12 (3);

(c) the recognition of national technical specifications in accordance with Article 4 (3);

shall be adopted in accordance with the procedure laid down in paragraphs 3 and 4.

3. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the committee shall be

weighted in the manner set out in that Article. The chairman shall not vote.

4. The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by qualified majority.

If, within three months of the proposal being submitted to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

CHAPTER IX: Safeguard clause

Article 21

1. Where a Member State ascertains that a product declared to be in conformity with the terms of this Directive does not comply with Articles 2 and 3, it shall take all appropriate measures to withdraw those products from the market, prohibit the placing thereof on the market or restrict free movement thereof.

The Member State concerned shall immediately inform the Commission of any such measure, indicating the reasons for its decision, and in particular whether non-conformity is due to:

(a) failure to comply with Articles 2 and 3, where the product does not meet the technical specifications referred to in Article 4;

(b) incorrect application of the technical specifications referred to in Article 4;

(c) shortcomings in the technical specifications

referred to in Article 4 themselves.

2. The Commission shall carry out a consultation of the parties concerned as soon as possible. Where the Commission finds, after this consultation, that the action is justified, it shall immediately so inform the Member State that took the action as well as the other Member States.

3. Where the decision referred to in paragraph 1 is attributed to shortcomings in the standards or technical specifications, the Commission, after consulting the parties concerned, shall bring the matter before the committee referred to in Article 19, as well as the committee set up under Directive 83/189/EEC in the case of shortcomings in a harmonized standard. within two months if the Member State which has taken the measures intends to uphold them and shall start the procedures referred to in Article 5 (2) .

4 . The Member State concerned shall take appropriate action against whomsoever made the declaration of conformity and shall inform the Commission and the other Member States thereof.

5 . The Commission shall ensure that the Member States are kept informed of the progress and outcome of this procedure..

CHAPTER X: Final provisions

Article 22

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with the provisions of this Directive within 30 months of its notification (1). They shall forthwith inform the Commission thereof.

(1) This Directive was notified to the Member States on 27 December 1988.

2. Member States shall communicate to the Commission the texts of the provisions of national

law which they adopt in the field governed by this Directive.

Article 23

At the latest by 31 December 1993, the Commission, in consultation with the committee referred to in Article 19, shall re-examine the practicability of the procedures laid down by this Directive and, where necessary, submit proposals for appropriate amendments.

Article 24

This Directive is addressed to the Member States.

Done at Brussels, 21 December 1988.

For the Council

The President

V. PAPANDEOU

ANNEX 1: ESSENTIAL REQUIREMENTS

The products must be suitable for construction works which (as a whole and in their separate parts) are fit for their intended use, account being taken of economy, and in this connection satisfy the following essential requirements where the works are subject to regulations containing such requirements. Such requirements must, subject to normal maintenance, be satisfied for an economically reasonable working life. The requirements generally concern actions which are foreseeable.

1. Mechanical resistance and stability

The construction works must be designed and built in such a way that the loadings that are liable to act on it during its construction and use will not lead to any of the following:

- (a) collapse of the whole or part of the work;
- (b) major deformations to an inadmissible degree;
- (c) damage to other parts of the works or to fittings or installed equipment as a result of major

deformation of the load-bearing construction;

(d) damage by an event to an extent disproportionate to the original cause

2. Safety in case of fire

The construction works must be designed and built in such a way that in the event of an outbreak of fire:

- the load-bearing capacity of the construction can be assumed for a specific period of time,
- the generation and spread of fire and smoke within the works are limited.
- the spread of the fire to neighbouring construction works is limited,
- occupants can leave the works or be rescued by other means.
- the safety of rescue teams is taken into consideration.

3. Hygiene, health and the environment

The construction work, must be designed and built in such a way that it will not be a threat to the hygiene or health of the occupants or neighbours, in particular as a result of any of the following:

- the giving-off of toxic gas,
- the presence of dangerous particles or gases in the air.
- the emission of dangerous radiation
- pollution or poisoning of the water or soil,
- faulty elimination of waste water, smoke, solid or liquid wastes,
- the presence of damp in parts of the works or on surfaces within the works.

4. Safety in use

The construction work must be designed and built in such a way that it does not present unacceptable risks of accidents in service or in operation such as slipping, falling, collision, burns, electrocution, injury from explosion.

5. Protection against noise

The construction works must be designed and built in such a way that noise perceived by the occupants or people nearby is kept down to a level that will not threaten their health and will allow them to sleep, rest and work in satisfactory conditions.

6. Energy economy and heat retention

The construction works and its heating, cooling and ventilation installations must be designed and built in such a way that the amount of energy required in use shall be low, having regard to the climatic conditions of the location and the occupants.

ANNEX II: EUROPEAN TECHNICAL APPROVAL

1. A request for approval may be made by a manufacturer, or his agent established in the Community, only to a single body, authorized for this purpose

2. The approval bodies designated by the Member States form an organization. In the performance of its duties, this organization is obliged to work in close coordination with the Commission which shall consult the committee referred to in Article 19 of the Directive on important matters. Where a Member State has designated more than one approval body, the Member State shall be responsible for coordinating such bodies; it shall also designate the body which shall be spokesman in the organization.

3. The common procedural rules for making the request, the preparation and the granting of approvals are drawn up by the organization comprising the designated approval bodies. The common procedural rules are adopted by the Commission on the basis of the opinion of the committee in accordance with Article 20.

4. In the framework of the organization comprising them, the approval bodies shall afford each other all necessary support. This organization is also responsible for coordination on specific questions of technical approval. If necessary, the organization shall establish sub-groups for this purpose.

5. The European technical approvals are published by the approval bodies, which notify all other approved bodies. At the request of an authorized approval body, a complete set of supporting documents for an approval which has been granted is to be forwarded to the latter for information.

6. The costs arising from the European technical approval procedure shall be paid by the applicant in accordance with national rules.

ANNEX III: ATTESTATION OF CONFORMITY WITH TECHNICAL SPECIFICATIONS

1. METHODS OF CONTROL OF CONFORMITY

When the procedures for attestation of conformity of a product with technical specifications pursuant to article 13 are being determined, the following methods of control of conformity shall be used; the choice and combination of methods for any given system shall depend on requirements for the particular product or group of products according to the criteria indicated in Article 13 (3) and (4):

- (a) initial type-testing of the product by the manufacturer or an approved body ;
- (b) testing of samples taken at the factory in accordance with a prescribed test plan

by the manufacturer or an approved body;
(c) audit-testing of samples taken at the factory, on the open market or on a construction site by the manufacturer or an approved body;
(d) testing of samples from a batch which is ready for delivery, or has been delivered, by the manufacturer or an approved body;
(e) factory production control; (f) initial inspection of factory and of factory production control by an approved body;
(g) continuous surveillance, judgement and assessment of factory production control by an approved body.

In the Directive, factory production control means the permanent internal control of production exercised by the manufacturer. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures. This production control system documentation shall ensure a common understanding of quality assurance and enable the achievement of the required product characteristics and the effective operation of the production control system to be checked.

2. SYSTEMS OF CONFORMITY ATTESTATION

Preference is given to application of the following systems of conformity attestation.

(i) Certification of the conformity of the product by an approved certification body on the basis of:

(a) (tasks for the manufacturer)

(1) factory production control;
(2) further testing of samples taken at the factory by the manufacturer in accordance with a prescribed test plan;

(b) (tasks for the approved body)

(3) initial type-testing of the product;
(4) initial inspection of factory and of factory production control;
(5) continuous surveillance, assessment and approval of factory production control;
(6) possibly, audit-testing of samples taken at the factory, on the market or on the construction site.

(ii) Declaration of conformity of the product by the manufacturer on the basis of:

First possibility:

(a) (Tasks for the manufacturer)

(1) initial type-testing of the product;
(2) factory production control;
(3) possibly, testing of samples taken at the factory in accordance with a prescribed test plan;

(b) (tasks for the approved body)

(4) certification of factory production control on the basis of:

- initial inspection of factory and of factory production control, - possibly, continuous surveillance, assessment and approval of factory production control.

Second possibility:

(1) initial type-testing of the product by an approved laboratory ;
(2) factory production control.

Third possibility:

(a) initial type-testing by the manufacturer;
(b) factory production control.

3. BODIES INVOLVED IN THE ATTESTATION OF CONFORMITY

With respect to the function of the bodies involved in the attestation of conformity, distinction shall be made

between

(i) certification body, which means an impartial body, governmental or non-governmental, possessing the necessary competence and responsibility to carry out conformity certification according to given rules of procedure and management;

(ii) inspection body, which means an impartial body having the organization, staffing, competence and integrity to perform according to specified criteria functions such as assessing, recommending for acceptance and subsequent audit of manufacturers' quality control operations, and selection and evaluation of products on site or in factories or elsewhere, according to specific criteria;

(iii) testing laboratory, which means a laboratory which measures, examines, tests, calibrates or otherwise determines the characteristics or performance of materials or produces.

In case (i) and (ii) (first possibility) of paragraph 2, the three functions 3 (i) to (iii) may be performed by one and the same body or by different bodies, in which case the inspection body and /or the testing laboratory involved in the attestation of conformity carries out its function on behalf of the certification body.

For the criteria concerning the competence, impartiality and integrity of certification bodies, inspection bodies and testing laboratories, see Annex 1V.

4. EC CONFORMITY MARK, EC CERTIFICATE OF CONFORMITY, EC DECLARATION OF CONFORMITY

4.1. CE conformity marking

- The CE conformity marking shall consist of the initials "CE " taking the following form:

- If the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.
- The various components of the CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.
- The CE marking shall be followed by the identification number of the body involved in the production control stage.

Additional information

- The CE marking shall be accompanied by the name or identifying mark of the producer, the last two digits of the year in which the marking was affixed, and where appropriate, the number of the EC certificate of conformity and, where appropriate, indications to identify the characteristics of the product on the basis of the technical specifications.

4.2. EC certificate of conformity

The EC certificate of conformity shall contain in particular

- name and address of the certification body
- name and address of the manufacturer or his agent established in the Community
- description of the product (type, identification, use...)
- provisions to which the product conforms,
- particular conditions applicable to the use of the product,
- the certificate's number,
- conditions and period of validity of the certificate, where applicable,

- name of, and position held by, the person empowered to sign the certificate.

4.3. EC declaration of conformity

The EC declaration of conformity shall contain in particular:

- name and address of the manufacturer or his agent established in the Community,
- description of the product (type, identification, use ...),
- provision to which the product conforms,
- particular conditions applicable to the use of the product,
- name and address of the approved body, where applicable,
- name of, and position held by, the person empowered to sign the declaration on behalf of - the manufacturer or of his authorized representative.

4.4. The certificate and declaration of conformity shall be presented in the official language or languages of the Member State in which the product is to be used

ANNEX IV: APPROVAL OF TESTING LABORATORIES, INSPECTION BODIES AND CERTIFICATION BODIES

The testing laboratories, the inspection bodies and the certification bodies designated by the Member States must fulfil the following minimum conditions:

1. availability of personnel and of the necessary means and equipment;
2. technical competence and professional integrity of personnel;
3. impartiality, in carrying out the tests, preparing the reports, issuing the certificates and performing the surveillance provided for in the Directive, of staff and technical personnel in relation to all circles, groups or persons directly or indirectly concerned with construction products;
4. maintenance of professional secrecy by personnel;
5. subscription of a civil liability insurance unless that liability is covered by the State under national law Fulfilment of the conditions under 1 and 2 shall be verified at

intervals by the competent authorities of Member States.
 Fulfilment of the conditions under 1 and 2 shall be verified at intervals by the competent authorities of Member States.

Harmonized Standards for Construction Products

Taken From

<http://europa.eu.int/comm/enterprise/newapproach/standardization/harmstds/reflist/construc.html>

The information contained in the summary list is a compilation of the references of standards which have been published in the Official Journal of the European Union. It does not have any legal validity; only publication in the Official Journal produces legal affect.

ESO (1)	Reference	Title of the standard	Date of applicability of the standard as harmonised European standard acc. to Art. 4(2)(a) of Directive 89/106/EEC	Date of the end of the co-existence period (2)	First Publication in OJ
CEN	EN 40-5:2002	Lighting columns - Part 5: Requirements for steel lighting columns	2003-02-01	2004-02-01	OJ C212 of 2002-09-06
CEN	EN 40-6 :2002	Lighting columns - Part 6: Requirements for aluminium lighting columns	2003-02-01	2004-02-01	OJ C212 of 2002-09-06
CEN	EN 54-3:2001/ A1:2002	Fire detection and fire alarm systems - Part 3: Fire alarm devices - Sounders	2003-04-01	2005-06-30	OJ C320 of 2002-12-20
CEN	EN 54-5:2000/ A1:2002	Fire detection and fire alarm systems - Part 5: Heat detectors - Point detectors	2003-04-01	2005-06-30	OJ C320 of 2002-12-20
CEN	EN 54-7:2000/ A1:2002	Fire detection and fire alarm systems - Part 7: Smoke	2003-04-01	2005-06-30	OJ C320 of 2002-12-20

		detectors - Point detectors using scattered light, transmitted light or ionization			
CEN	EN 179:1997/A1:2001	Building hardware - Emergency exit devices operated by a lever handle or push pad - Requirements and test methods	2002-04-01	2003-04-01	OJ C40 of 2002-02-14
CEN	EN 197-1: 2000	Cement - Part 1: Composition, specifications and conformity criteria for common cements	2001-04-01	2002-04-01	OJ C20 of 2001-01-23
CEN	EN 459-1: 2001	Building lime - Part 1: Definitions, specifications and conformity criteria	2002-08-01	2003-08-01	OJ C40 of 2002-02-14
CEN	EN 588-2: 2001	Fibre cement pipes for drains and sewers - Part 2: Manholes and inspection chambers	2002-10-01	2003-10-01	OJ C 154 of 2002-06-28
CEN	EN 671-1: 2001	Fixed firefighting systems - Hose systems - Part 1: Hose reels with semi-rigid hose	2002-02-01	2004-04-01	OJ C202 of 2001-07-18
CEN	EN 671-2: 2001	Fixed firefighting systems - Hose systems - Part 2: Hose systems with lay-flat hose	2002-02-01	2004-04-01	OJ C202 of 2001-07-18
CEN	EN 681-1:1996/A2:2002	Elastomeric seals - Material requirements for pipe joint seal used in water and drainage applications - Part 1 : Vulcanized rubber	2003-01-01	2004-01-01	OJ C212 of 2002-09-06
CEN	EN 681-2:2000/A1:2002	Elastomeric seals - Material requirements for pipe joint seals used in water and drainage applications - Part 2: Thermoplastic elastomers	2003-01-01	2004-01-01	OJ C212 of 2002-09-06
CEN	EN 681-3:2000/A1:2002	Elastomeric seals - Material requirements for joint seals used in water and drainage applications - Part 3: Cellular materials of vulcanized rubber	2003-01-01	2004-01-01	OJ C212 of 2002-09-06
CEN	EN 681-4:2000/A1:2002	Elastomeric seals - Material requirements for pipe joint seals used in water and drainage applications - Part 4: Cast polyurethane sealing elements	2003-01-01	2004-01-01	OJ C212 of 2002-09-06
CEN	EN 682: 2001	Elastomeric seals - Materials requirements for seals used in pipes and fittings carrying gas and hydrocarbon fluids	2002-10-01	2003-12-01	OJ C 154 of 2002-06-28
CEN	EN 934-2: 2001	Admixtures for concrete, mortar and grout - Part 2: Concrete admixtures - Definitions,	2002-05-01	2003-05-01	OJ C40 of 2002-02-14

		requirements, conformity, marking and labelling			
CEN	EN 934-4: 2001	Admixtures for concrete, mortar and grout - Part 4: Admixtures for grout for prestressing tendons - Definitions, requirements, conformity, marking and labelling	2002-05-01	2003-05-01	OJ C40 of 2002-02-14
CEN	EN 1125:1997/A1:2001	Building hardware - Panic exit devices operated by a horizontal bar - Requirements and test methods	2002-04-01	2003-04-01	OJ C40 of 2002-02-14
CEN	EN 1337-7: 2000	Structural bearings - Part 7: Spherical and cylindrical PTFE bearings	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 1341: 2001	Slabs of natural stone for external paving - Requirements and test methods	2002-10-01	2003-10-01	OJ C 154 of 2002-06-28
CEN	EN 1342: 2001	Setts of natural stone for external paving - Requirements and test methods	2002-10-01	2003-10-01	OJ C 154 of 2002-06-28
CEN	EN 1343: 2001	Kerbs of natural stone for external paving - Requirements and test methods	2002-10-01	2003-10-01	OJ C 154 of 2002-06-28
CEN	EN 1344:2002	Clay pavers - Requirements and test methods	2003-01-01	2004-01-01	OJ C320 of 2002-12-20
CEN	EN 1916:2002	Concrete pipes and fittings, unreinforced, steel fibre and reinforced	2003-08-01	2004-11-23	OJ C47 of 2003-02-27
CEN	EN 1917:2002	Concrete manholes and inspection chambers, unreinforced, steel fibre and reinforced	2003-08-01	2004-11-23	OJ C320 of 2002-12-20
CEN	EN 1935: 2002	Building hardware - Single-axis hinges - Requirements and tests methods	2002-10-01	2003-12-01	OJ C 154 of 2002-06-28
CEN	EN 12004:2001/A1:2002	Adhesives for tiles - Definitions and specifications	2003-04-01	2004-04-01	OJ C212 of 2002-09-06
CEN	EN 12050-1: 2001	Wastewater lifting plants for buildings and sites- Principles of construction and testing - Part 1: Lifting plants for wastewater containing faecal matter	2001-11-01	2002-11-01	OJ C202 of 2001-07-18
CEN	EN 12050-2: 2000	Wastewater lifting plants for buildings and sites - Principles of construction and testing - Part 2: Lifting plants for faecal-free wastewater	2001-10-01	2002-10-01	OJ C180 of 2001-06-26

CEN	EN 12050-3: 2000	Wastewater lifting plants for buildings and sites - Principles of construction and testing - Part 3: Lifting plants for wastewater containing faecal matter for limited applications	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 12050-4: 2000	Wastewater lifting plants for buildings and sites - Principles of construction and testing - Part 4 : Non-return valves for faecal-free wastewater and wastewater containing faecal matter	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 12094-5: 2000	Fixed firefighting systems - Components for gas extinguishing systems - Part 5: Requirements and test methods for high and low pressure selector valves and their actuators for CO2 systems	2001-10-01	2004-04-01	OJ C202 of 2001-07-18
CEN	EN 12094-6: 2000	Fixed firefighting systems - Components for gas extinguishing systems - Part 6: Requirements and test methods for non-electrical disable devices for CO2 systems	2001-10-01	2004-04-01	OJ C202 of 2001-07-18
CEN	EN 12094-7: 2000	Fixed firefighting systems - Components for gas extinguishing systems - Part 7: Requirements and test methods for nozzles for CO2 systems	2001-10-01	2004-04-01	OJ C202 of 2001-07-18
CEN	EN 12094-13: 2001	Fixed firefighting systems - Components for gas extinguishing systems - Part 13: Requirements and test methods for check valves and non-return valves	2002-01-01	2004-04-01	OJ C202 of 2001-07-18
CEN	EN 12259-1:1999 + A1:2001	Fixed firefighting systems - Components for sprinkler and water spray systems - Part 1: Sprinklers	2002-04-01	2005-09-01	OJ C40 of 2002-02-14
CEN	EN 12259-2:1999/ A1:2001	Fixed firefighting systems - Components for sprinkler and water spray systems - Part 2: Wet alarm valve assemblies	2002-01-01	2004-04-01	OJ C358 of 2001-12-15
CEN	EN 12259-3:2000/ A1:2001	Fixed firefighting systems - Components for sprinkler and water spray systems - Part 3: Dry alarm valve assemblies	2002-01-01	2004-04-01	OJ C358 of 2001-12-15
CEN	EN 12259-4:2000/	Fixed firefighting systems -	2002-01-01	2004-04-	OJ C358 of

	A1:2001	Components for sprinkler and water spray systems - Part 4: Water motor alarms		01	2001-12-15
CEN	EN 12259-5:2002	Fixed firefighting systems - Components for sprinkler and water spray systems - Part 5 : Water flow detectors	2003-07-01	2005-09-01	OJ C47 of 2003-02-27
CEN	EN 12416-1: 2001	Fixed firefighting systems - Powder systems- Part 1: Requirements and test methods for components	2002-01-01	2004-04-01	OJ C202 of 2001-07-18
CEN	EN 12416-2: 2001	Fixed firefighting systems - Powder systems - Part 2: Design, construction and maintenance	2002-04-01	2004-04-01	OJ C40 of 2002-02-14
CEN	EN 12620:2002	Aggregates for concrete	2003-07-01	2004-06-01	OJ C320 of 2002-12-20
CEN	EN 12839: 2001	Precast concrete products - Elements for fences	2002-03-01	2003-03-01	OJ C40 of 2002-02-14
CEN	EN 12859: 2001	Gypsum blocks - Definitions, requirements and test methods	2002-04-01	2003-04-01	OJ C358 of 2001-12-15
CEN	EN 12860: 2001	Gypsum based adhesives for gypsum blocks - Definitions, requirements and test methods	2002-04-01	2003-04-01	OJ C358 of 2001-12-15
CEN	EN 13043:2002	Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas	2003-07-01	2004-06-01	OJ C47 of 2003-02-27
CEN	EN 13055-1:2002	Lightweight aggregates - Part 1: Lightweight aggregates for concrete, mortar and grout	2003-03-01	2004-06-01	OJ C212 of 2002-09-06
CEN	EN 13139:2002	Aggregates for mortar	2003-03-01	2004-06-01	OJ C212 of 2002-09-06
CEN	EN 13162: 2001	Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13163: 2001	Thermal insulation products for buildings - Factory made products of expanded polystyrene (EPS) - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13164: 2001	Thermal insulation products for buildings - Factory made products of extruded polystyrene foam (XPS) - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13165: 2001	Thermal insulation products for buildings - Factory made rigid polyurethane foam (PUR)	2002-03-01	2003-05-13	OJ C358 of 2001-12-15

		products - Specification			
CEN	EN 13166: 2001	Thermal insulation products for buildings - Factory made products of phenolic foam (PF) - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13167: 2001	Thermal insulation products for buildings - Factory made cellular glass (CG) products - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13168: 2001	Thermal insulation products for buildings - Factory made wood wool (WW) products - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13169: 2001	Thermal insulation products for buildings - Factory made products of expanded perlite (EPB) - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13170: 2001	Thermal insulation products for buildings - Factory made products of expanded cork (ICB) - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13171: 2001	Thermal insulating products for buildings - Factory made wood fibre (WF) products - Specification	2002-03-01	2003-05-13	OJ C358 of 2001-12-15
CEN	EN 13249: 2000	Geotextiles and geotextile-related products - Characteristics required for use in the construction of roads and other trafficked areas (excluding railways and asphalt inclusion)	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13250: 2000	Required characteristics for geotextiles and geotextile-related products used in the construction of railways	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13251: 2000	Geotextiles and geotextile-related products - Characteristics required for use in earthworks, foundations and retaining structures	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13252: 2000	Geotextiles and geotextile-related products - Characteristics required for use in drainage systems	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13253: 2000	Geotextiles and geotextile-related products - Characteristics required for use	2001-10-01	2002-10-01	OJ C180 of 2001-06-26

		in erosion control works (coastal protection, bank revetments)			
CEN	EN 13254: 2000	Geotextiles and geotextile-related products - Characteristics required for use in the construction of reservoirs and dams	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13255: 2000	Geotextiles and geotextile-related products - Characteristics required for use in the construction of canals	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13256: 2000	Geotextiles and geotextile-related products - Characteristics required for use in the construction of tunnels and underground structures	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13257: 2000	Geotextiles and geotextile-related products - Characteristics required for use in solid waste disposals	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13265: 2000	Geotextiles and geotextile-related products - Characteristics required for use in liquid waste containment projects	2001-10-01	2002-10-01	OJ C180 of 2001-06-26
CEN	EN 13383-1:2002	Armourstone - Part 1: Specification	2003-03-01	2004-06-01	OJ C212 of 2002-09-06
CEN	EN 13450:2002	Aggregates for railway ballast	2003-10-01	2004-06-01	OJ C47 of 2003-02-27
CEN	EN 13502:2002	Chimneys - Requirements and test methods for clay/ceramic flue terminals	2003-08-01	2004-08-01	OJ C320 of 2002-12-20
CEN	EN 13564-1:2002	Anti-flooding devices for buildings - Part 1 : Requirements	2003-05-01	2004-05-01	OJ C320 of 2002-12-20
CEN	EN 13813:2002	Screed material and floor screeds - Screed materials - Properties and requirements	2003-08-01	2004-08-01	OJ C320 of 2002-12-20
CEN	EN 13986:2002	Wood-based panels for use in construction - Characteristics, evaluation of conformity and marking	2003-04-01	2004-04-01	OJ C47 of 2003-02-27

