

# Rigid underlays for discontinuous roofing — Definitions and characteristics

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## National foreword

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A list of organizations represented on B/542/1 can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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## Rigid underlays for discontinuous roofing - Definitions and characteristics

Ecrans rigides de sous-toiture pour pose en discontinu -  
Définitions et caractéristiques

Unterdeckplatten für Dachdeckungen - Definitionen und  
Eigenschaften

This European Standard was approved by CEN on 28 August 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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## Foreword

This document (EN 14964:2006) has been prepared by Technical Committee CEN/TC 128 “Roof covering products for discontinuous laying and products for wall cladding”, the secretariat of which is held by IBN/BIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2007, and conflicting national standards shall be withdrawn at the latest by July 2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard is a product specification for rigid underlays of the type defined in Clause 3 of this European Standard and commonly used in a number of applications for roofing used in buildings.

Underlays of the type specified in this European Standard are deemed to be construction products in accordance with Article 1 of the Construction Products Directive (CPD).

The general test method standards referred to in this product specification fall within the scope of CEN/TC 128 unless otherwise stated in this European Standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Introduction

Article 2 of the CPD requires that construction products be fit for intended use, that is to say that the products shall have the characteristics enabling the works incorporating such products to satisfy the Essential Requirements referred to in Article 3 of the CPD.

The harmonized characteristics specified by this European Standard are derived from Mandate M/122 “*Roof coverings, rooflights, roof windows and ancillary products*”. It contains also voluntary characteristics. Annex ZA indicates which characteristics of this European Standard are harmonized.

The test methods referred to in this European Standard relate to the use of rigid underlays in roofing.

## 1 Scope

This European Standard specifies the technical requirements for factory made flat or profiled sheets (wood-based, fibre cement flat sheets or corrugated bituminous sheets or other materials which can be characterised as one of these materials) that are used as underlays in pitched roof constructions with discontinuously laid coverings (e.g. tiles, slates). This European Standard also establishes methods of inspection and testing as well as criteria for evaluation of conformity.

This European Standard does not include rigid underlays which have a stiffening function or a load bearing function.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 300, *Oriented Strand Boards (OSB) — Definitions, classification and specifications*

EN 312, *Particleboards — Specifications*

EN 324-1, *Wood-based panels — Determination of dimensions of boards — Part 1: Determination of thickness, width and length*

EN 324-2, *Wood-based panels — Determination of dimensions of boards — Part 2: Determination of squareness and edge straightness*

EN 534:2006 *Corrugated bitumen sheets — Product specification and test methods*

EN 622-2, *Fibreboards — Specifications — Part 2: Requirements for hardboards*

EN 622-3, *Fibreboards — Specifications — Part 3: Requirements for medium boards*

EN 622-4, *Fibreboards — Specifications — Part 4: Requirements for softboards*

EN 622-5, *Fibreboards — Specifications — Part 5: Requirements for dry process boards (MDF)*

EN 636, *Plywood — Specifications*

EN 12467:2004, *Fibre cement flat sheets — Product specifications and test methods*

EN 12524:2000, *Building materials and products — Hygrothermal properties — Tabulated design values*

EN 12664, *Thermal performance of building materials and products — Determination of thermal resistance by means of guarded hot plate and heat flow meter methods — Dry and moist products of medium and low thermal resistance*

EN 13501-1:2002, *Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests*

EN 13986:2004, *Wood-based panels for use in construction — Characteristics, evaluation of conformity and marking*

EN 14279, *Laminated Veneer Lumber (LVL) — Definitions, classification and specifications*

EN ISO 140-3, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 3: Laboratory measurements of airborne sound insulation of building elements (ISO 140-3:1995)*

EN ISO 717-1, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation (ISO 717-1:1996)*

EN ISO 12572, *Hygrothermal performance of building materials and products — Determination of water vapour transmission properties (ISO 12572:2001)*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

**3.1 rigid underlay**  
factory made flat or profiled sheets: wood-based panels, fibre cement sheets, corrugated bitumen sheets or sheets of other materials.

NOTE They are used as underlay to coverings of pitched roofs (e.g. tiles, slates). They can be laid overlapping, one sheet covering the other (OL) or interlocking, sheets side by side (IL)

**3.1.1 wood-based panel**  
solid wood panel, laminated veneer lumber (LVL), plywood, oriented strand board (OSB), resin-bonded particleboard, cement-bonded particleboard, fibreboard or wood fibre insulation board

**3.1.2 fibre cement flat sheet**  
sheets consisting essentially of cement or a calcium silicate formed by a chemical reaction of a siliceous and a calcareous material, reinforced by organic and/or inorganic fibres.

NOTE Fibre cement sheets can be pressed or un-pressed

**3.1.3 corrugated bitumen sheet**  
profiled sheet consisting of an intimate and homogeneous mixture of organic and/or inorganic fibres and bitumen.

NOTE The surface may be natural coloured, spun-dyed, coated, granulised or mineralised

**3.2 sampling**  
procedure used to draw or constitute a sample

**3.3 sample**  
sheet from which a test piece is taken

**3.3.1 test piece**  
part of the sample from which test specimens are taken

**3.3.2 test specimen**  
piece of accurate dimensions taken from the test piece



### 3.4

#### **manufacturer's declared value (MDV)**

value declared by the manufacturer accompanied by a declared tolerance

## **4 Product characteristics and test methods**

### **4.1 General**

Rigid underlays based on wood, fibre cement or made of corrugated bitumen sheets have to meet the requirements as given in 4.3 and shall be tested accordingly. Rigid underlays made of other materials shall be grouped into one of the different materials (wood-based, fibre cement, corrugated bitumen sheets) and all tests shall be carried out according to the respective material group.

Factory production control and verification of manufacturer's stated values shall be carried out in accordance with Annex A.

### **4.2 Dimensions and tolerances (dimensional variation)**

The tolerances on dimensions of the products described in this European Standard are to be classified as follows:

- Type OL: rigid underlays laid overlapping;
- Type IL: rigid underlays laid interlocking.

The tolerances for wood-based panels, fibre cement flat sheets and the corrugated bitumen sheets for type OL shall comply with the relevant applicable product standards as listed in Clause 2. Dimensions and tolerances of wood-based panels shall be determined in accordance with EN 324-1 and EN 324-2.

Dimensions and tolerances of fibre cement flat sheets shall be determined in accordance with EN 12467.

Dimensions and tolerances of corrugated bitumen sheets shall be determined in accordance with EN 534.

If a product is not based on one of these materials, the tolerances for type OL are given in Table 1.

For all products type IL the values of tolerances are given in Table 2.

**Table 1 — Type OL: Tolerances for rigid underlays laid overlapping**

Characteristic		Tolerance
Length		$\pm 5$ mm
Width		$\pm 1$ %
Straightness or squareness <sup>a</sup>		Deviation: 4 mm/m length
Thickness	Flat products	$\pm 1$ mm
	Corrugated products	$\pm 10$ %
Height of corrugations		$\pm 1$ %
Pitch of corrugations		$\pm 1$ %
<sup>a</sup> Either one may be declared.		

**Table 2 — Type IL: Tolerances for rigid underlays laid interlocking**

Characteristic	Tolerance
Length	$\pm 5$ mm
Width	$\pm 3$ mm, max 1/3 of interlocking
Thickness	+ 3 mm/ -1 mm
Squareness	2 mm/m
Straightness	1,5 mm/m, max. 1/3 of interlocking

### 4.3 Application-related characteristics

#### 4.3.1 Mechanical resistance

##### 4.3.1.1 General

The mechanical resistance of products used as rigid underlays (under the scope of this European Standard) is characterized through bending strength.

##### 4.3.1.2 Corrugated bitumen sheets

The bending under downward load shall be determined in accordance with EN 534:2006, 7.2.1, with the following modifications:

- the distance between the tubes (Figure 8/key 2) shall be 400 mm instead of 620 mm;
- the distance between the three supports (Figure 8/key 5) shall be modified in the proportion of 400/620: e.g. 210 mm instead of 325 mm, 200 mm instead of 310 mm;

- instead of square tube (Figure 8/key 2), rectangular tubes of 100 mm width and 40 mm height shall be used;
- the minimum load for a deflection of 1/200 of a span of 400 mm shall be 500 N/m<sup>2</sup>.

#### 4.3.1.3 Fibre cement products

The bending strength shall be determined in accordance with EN 12467. The product shall comply with at least category D as given in EN 12467:2004. Un-pressed sheets have to fulfil at least class 3, pressed sheets at least class 4 according to EN 12467:2004.

#### 4.3.1.4 Wood based panels

The bending strength for wood based panels (required to be at least suitable for general purpose uses in humid conditions) shall be at least the limit value for the following boards:

- HB.H according to EN 622-2;
- MBL.H according to EN 622-3;
- MBH.H according to EN 622-3;
- SB.H according to EN 622-4;
- MDF.RWH according to EN 622-5;
- Laminated veneer lumber LVL/2 according to EN 14279;
- OSB/3 and OSB/4 according to EN 300;
- Particleboard P5 according to EN 312;
- Plywood C2 according to EN 636.

#### 4.3.1.5 Other materials

The mechanical resistance of products for use as rigid underlays shall be determined in accordance with the product standards of corrugated bitumen sheets, fibre cement sheets or wood based panels and all tests shall be carried out according to the respective material group.

#### 4.3.2 Reaction to fire

Reaction to fire shall be determined when subject to regulatory requirements, and may be determined when not subject to such requirements.

Except for wood-based panels, where the manufacturer wishes to declare reaction to fire performance (e.g. where the product is subject to regulatory requirements), the product shall be tested and classified in accordance with EN 13501-1:2002, Table 1.

For wood-based panels, the reaction to fire performance shall be tested and classified according to EN 13501-1:2002, Table 1 or taken from EN 13986:2004, Table 8 (CWFT).

Where the test method requires it, products shall be mounted and fixed in a manner representative of their intended end use conditions.

### 4.3.3 Water impermeability

#### 4.3.3.1 Corrugated bitumen sheets

Water impermeability shall be determined according to EN 534.

#### 4.3.3.2 Fibre cement products

Water impermeability shall be determined in accordance with EN 12467.

The evaluation shall be done in accordance with EN 12467. Products shall meet the requirements for category B.

#### 4.3.3.3 Wood-based panels

Water impermeability shall be determined in accordance with EN 12467:2004, 7.3.3 (20 mm water column, test period 24 h, 3 test specimens), with the modification that for wood-based panels:

- the diameter of the testing frame shall be  $\geq 100$  mm and
- the test specimen shall be conditioned at the climate of  $(23 \pm 5)$  °C and  $(50 \pm 10)$  %.

Evaluation shall be carried out in accordance with EN 12467.

#### 4.3.3.4 Other materials

The water impermeability of products for use as rigid underlays shall be determined in accordance with the product standards of corrugated bitumen sheets, fibre cement sheets or wood-based panels and all tests shall be carried out according to the respective material group.

### 4.3.4 Water vapour permeability

For wood-based panels and corrugated bitumen sheets the declaration of values of water vapour permeability may be made by reference to standardised values of EN 12524:2000, Table 1 (wet cup) or shall be declared by test results according to EN ISO 12572, climate C. For fibre cement products the values of water vapour permeability shall be declared by test results according to EN ISO 12572, climate C. If the product is tested according to EN ISO 12572, climate C, the results shall lie within the declared tolerance of the manufacturer's declared value.

### 4.3.5 Durability

#### 4.3.5.1 Corrugated bitumen sheets

Durability shall be determined according to EN 534:2006, 5.4.2, water impermeability after freeze/thaw ageing, category S.

#### 4.3.5.2 Fibre cement products

Durability shall be determined according EN 12467. Bending strength shall be measured in ambient conditions before and after conditioning for warm water, soak-dry and freeze-thaw for category D.

Evaluation shall be carried out in accordance with EN 12467.

#### 4.3.5.3 Wood-based panels

Durability shall comply at least with the limit values for moisture resistance for wood based panels used for general purpose in humid conditions for the relevant board types:

- HB.H according to EN 622-2;
- MBL.H according to EN 622-3;
- MBH.H according to EN 622-3;
- SB.H according to EN 622-4;
- MDF.RWH according to EN 622-5;
- Laminated veneer lumber LVL/2 according to EN 14279;
- OSB/3 and OSB/4 according to EN 300;
- Particleboard P5 according to EN 312;
- Plywood C2 according to EN 636.

#### 4.3.5.4 Other materials

The durability of products for use as rigid underlays shall be determined in accordance with the product standard of corrugated bitumen sheets, fibre cement sheets or wood-based panels and all tests shall be carried out according to the respective material group.

#### 4.3.6 Thermal resistance

The thermal resistance or thermal conductivity shall be determined only for uses subject to thermal insulation requirements.

It shall either be determined according to EN 12664 or taken from EN 12524.

#### 4.3.7 Airborne sound insulation

The airborne sound insulation shall be determined only for uses subject to acoustic sound requirements. The sound insulation of building elements shall be determined according to EN ISO 140-3 and classified according to EN ISO 717-1.

## 5 Evaluation of conformity

### 5.1 General

The compliance of an underlay for roof coverings with the requirements of this standard and with the stated values (including classes) shall be demonstrated by:

- initial type testing,
- factory production control by the manufacturer, including product assessment.

For the purpose of testing, the products may be grouped into families where it is considered that the results for one or more characteristics from any one product in the family are representative for all other products within that family.

## **5.2 Initial type testing**

Initial type testing shall be performed to demonstrate compliance with this European Standard, except where tests were previously performed in accordance with the provisions of this European Standard (same product, same characteristic(s), test method, sampling procedure, system of attestation of conformity etc.). In addition initial type testing shall be performed at the beginning of the production of a new underlay type (unless a member of the same family) or at the beginning of a new method of production (where this may affect the stated properties). It shall cover the performance characteristics relevant to the intended end application. The verification of the characteristic itself is not necessary when tabulated values are used.

Whenever a change occurs in the underlay design, the raw material or supplier of the components, or the production process (subject to the definition of a family), which would change significantly one or more of the stated characteristics, the type tests shall be repeated for the appropriate characteristic(s).

The results of all type tests shall be recorded and held by the manufacturer for a period of at least ten years after the date of last production of the product to which they relate.

Where a sheet product has already been evaluated against one or more characteristics required by this European Standard, those characteristics do not need to be re-evaluated for compliance with this European Standard.

## **5.3 Factory production control (FPC)**

### **5.3.1 General**

The manufacturer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform to the stated characteristics. The FPC system shall consist of procedures, regular tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product.

An FPC system conforming with the requirements of EN ISO 9001, and made specific to the requirements of this standard, is considered to satisfy the above requirements.

The results of tests or assessments requiring action shall be recorded, as shall any action taken. The action to be taken when control values or criteria are not met shall be recorded.

### **5.3.2 Frequency of testing**

The rules for factory production control and verification of manufacturer's values are given in Annex A.

## **6 Marking, labelling and packaging**

The following information shall be indicated on the label, the packaging or on the accompanying commercial documents:

- a) production date or identification number;
- b) product trade name;
- c) nominal length and width;
- d) nominal thickness or the height of corrugation;

- e) water vapour diffusion resistance factor ( $\mu$ );
- f) type OL / IL of product.

Where ZA.3 covers the same information as required by this clause, the requirements of this clause are met.

## **Annex A** (normative)

### **Rules for factory production control**

The factory production control according to this standard covers all types of rigid underlays for discontinuous roofing complying with this standard and the permanent factory production control of these sheets by the manufacturer.

Rigid underlays for roof cover comply with the characteristics of this European Standard if it is statistically verified that at least 95 % of the test specimens comply with the characteristics made for the individual type tests.

For corrugated bitumen sheets, all characteristics referring to EN 534 shall be tested in accordance to the frequencies of FPC in EN 534. Additionally, water vapour transmission properties (4.3.4) are tested as an ITT, but no further FPC testing is required, other than ensuring the product remains the same as the one submitted to ITT. For wood-based panels, all characteristics referring to EN 13986 shall be tested in accordance to the frequencies of FPC in EN 13986. Additionally, specific characteristics to this European Standard shall be tested. Water vapour transmission properties (4.3.4) are tested as ITT or tabulated values are used, but no further FPC testing is required, other than ensuring the product remains the same as the one submitted to ITT.

For fibre cement products, all characteristics referring to EN 12467 shall be tested in accordance with the frequencies of FPC in EN 12467. Additionally, water vapour transmission properties (4.3.4) are tested as an ITT, but no further FPC testing is required, other than ensuring the product remains the same as the one submitted to ITT.



## Annex ZA (informative)

### Clauses of this European Standard addressing the provisions of the EU Construction Products Directive

#### ZA.1 Scope and relevant characteristics

This European Standard has been prepared under the mandate M/122 "Roof coverings, rooflights, roof windows and ancillary products" given to CEN by the European Commission and the European Free Trade Association.

The clauses of this European Standard shown in this annex meet the requirements of the mandate given under the EU Construction Products Directive (89/106).

Compliance with these clauses confers a presumption of fitness of the construction product covered by this European Standard for its intended use(s) under the mandate; reference shall be made to the information accompanying the CE marking.

**WARNING:** Other requirements and other EU Directives, not affecting the fitness for intended use(s), may apply to the construction products falling within the scope of this European Standard.

**NOTE** In addition to any specific clauses relating to dangerous substances contained in this standard, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the EU Construction Products Directive, these requirements need also to be complied with, when and where they apply. An informative database of European and national provisions on dangerous substances is available at the Construction web site on EUROPA (accessed through <http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain.htm>).

The scope of this annex is the same as Clause 1 of this standard and is defined in Tables ZA.1.1 to ZA.1.3.

This annex establishes the conditions for the CE marking of rigid underlays intended for the uses indicated in Tables ZA.1.1 to ZA 1.3 and shows the relevant clauses applicable.

Table ZA.1.1 — Relevant clauses for rigid underlays made from corrugated bitumen sheets

Essential Characteristics	Requirement clauses in this European Standard	Levels or classes
Dimensional variation	4.2	-
Mechanical resistance	4.3.1.2 or 4.3.1.5	—
Reaction to fire	4.3.2	A1 to F
Water impermeability	4.3.3.1 or 4.3.3.4	—
Water vapour permeability	4.3.4	—
Durability	4.3.5.1 or 4.3.5.4	—
Thermal resistance	4.3.6	-
Airborne sound insulation	4.3.7	-

Table ZA.1.2 — Relevant clauses for fibre cement rigid underlays

Essential Characteristic	Requirement clauses in this European Standard	Levels or classes
Dimensional variation	4.2	-
Mechanical resistance	4.3.1.3 or 4.3.1.5	—
Reaction to fire	4.3.2	A1 to F
Water impermeability	4.3.3.2 or 4.3.3.4	—
Water vapour permeability	4.3.4	—
Durability	4.3.5.2 or 4.3.5.4	—
Thermal resistance	4.3.6	-
Airborne sound insulation	4.3.7	-

Table ZA.1.3 — Relevant clauses for wood-based rigid underlays

Essential Characteristics	Requirement clauses in this European Standard	Levels or classes
Dimensional variation	4.2	-
Mechanical resistance	4.3.1.4 or 4.3.1.5	–
Reaction to fire	4.3.2	A1 to F
Water impermeability	4.3.3.3 or 4.3.3.4	–
Water vapour permeability	4.3.4	–
Durability	4.3.5.3 or 4.3.5.4	–
Thermal resistance	4.3.6	-
Airborne sound insulation	4.3.7	-

The requirement on a certain characteristic is not applicable in those Member States (MSs) where there are no regulatory requirements on that characteristic for the intended use of the product. In this case, manufacturers placing their products on the market of these MSs are not obliged to determine nor declare the performance of their products with regard to this characteristic and the option “No performance determined” (NPD) in the information accompanying the CE marking (see ZA.3) may be used. The NPD option may not be used, however, where the characteristic is subject to a threshold level.

## ZA.2 Procedure for the attestation of conformity of rigid underlays for discontinuous roofing

### ZA.2.1 Systems of attestation of conformity

The systems of attestation of conformity of rigid underlays indicated in Tables ZA.1.1 to ZA.1.3, in accordance with the Decision of the Commission 98/436/EC as given in Annex III of the mandate M/122 “Roof coverings, rooflights, roof windows and ancillary products”, are shown in Table ZA.2 for the indicated intended uses and relevant levels or classes.

Table ZA.2 — Systems of attestation and conformity

Product	Intended use	Classes (reaction to fire)	Attestation of conformity system
Roof underlays	For uses subject to reaction to fire regulations	(A1, A2, B, C)* (A1, A2, B, C)**, D, E (A1 – E)***, F	1 <sup>1)</sup> 3 <sup>2)</sup> 4 <sup>3)</sup>
	For uses subject to regulations on dangerous substances	–	3 <sup>2)</sup>

<sup>1)</sup> System 1: See Directive 89/106/EEC (CPD) Annex III.2.(i), without audit testing of samples.  
<sup>2)</sup> System 3: See Directive 89/106/EEC (CPD) Annex III.2.(ii), Second possibility.  
<sup>3)</sup> System 4: See Directive 89/106/EEC (CPD) Annex III.2.(ii), Third possibility.  
\* Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material).  
\*\* Products/materials not covered by footnote (\*).  
\*\*\* Products/materials which do not require to be tested for reaction to fire, i.e. those of Class A1 in accordance with Decision 96/603/EC, as amended and those classified without further testing (CWFT).

The attestation of conformity of the product given in Tables ZA.1.1 to ZA1.3 shall be in accordance with the evaluation of conformity procedures indicated in Tables ZA.3.1 to ZA.3.3 resulting from application of the clauses of this European Standard indicated therein.

Table ZA.3.1 — Assignment of evaluation of conformity tasks (for system 1)

Tasks		Content of the task	Evaluation of conformity clauses to apply
Tasks under the responsibility of the manufacturer	Factory production control (F.P.C)	Parameters related to all characteristics of Tables ZA.1 relevant for the intended end use	5.3
	Initial type testing by a notified test laboratory	Dangerous substances	5.2
	Initial type testing by the manufacturer	All characteristics of Tables ZA.1 relevant for the intended end use except dangerous substances and reaction to fire in the classes below	5.2
Tasks under the responsibility of the product certification body	Initial type testing	Reaction to fire classes (A1, A2, B, C)*	5.2
	Initial inspection of factory and of F.P.C	Parameters related to all characteristics of Tables ZA.1 relevant for the intended end use, in particular reaction to fire	5.3
	Continuous surveillance, assessment and approval of F.P.C.	Parameters related to all characteristics of Tables ZA.1 relevant for the intended end use, in particular reaction to fire	5.3
* See the * footnote in Table ZA.2.			

Table ZA.3.2 — Assignment of evaluation of conformity tasks (for system 3)

Tasks		Content of the task	Evaluation of conformity clauses to apply
Tasks under the responsibility of the manufacturer	Factory production control (F.P.C)	Parameters related to all relevant characteristics of Tables ZA.1	5.3
	Initial type testing by a notified test laboratory	Reaction to fire classes (A1, A2, B, C)**, D, E, and dangerous substances	5.2
	Initial type testing by the manufacturer	All relevant characteristics of Tables ZA.1 except reaction to fire and dangerous substances	5.2
* See the * footnote in Table ZA.2.			

Table ZA.3.3 — Assignment of evaluation of conformity tasks (for system 4)

Tasks		Content of the task	Evaluation of conformity clauses to apply
Tasks under the responsibility of the manufacturer	Factory production control (F.P.C)	Parameters related to all relevant characteristics of Tables ZA.1	5.3
	Initial type testing	All relevant characteristics of Tables ZA.1, namely mechanical resistance, water impermeability, water vapour transmission and durability	5.2

### ZA.2.2 EC Certificate and Declaration of conformity

(In case of products with system 1): When compliance with the conditions of this annex is achieved, the certification body shall draw up a certificate of conformity (EC Certificate of conformity), which entitles the manufacturer to affix the CE marking. The certificate shall include:

- name, address and identification number of the certification body;
- name and address of the manufacturer, or his authorised representative established in the EEA (European Economic Area), and place of production;
- description of the product (type, identification, use);
- provisions to which the product conforms (i.e. Annex ZA of this EN);
- particular conditions applicable to the use of the product (e.g. provisions for use under certain conditions);
- the number of the certificate;
- conditions of validity of the certificate, where applicable;
- name of, and position held by, the person empowered to sign the certificate.

In addition, the manufacturer shall draw up a declaration of conformity (EC Declaration of conformity) including the following:

- name and address of the manufacturer, or his authorised representative established in the EEA;
- name and address of the certification body;
- description of the product (type, identification, use), and a copy of the information accompanying the CE marking;

NOTE Where some of the information required for the Declaration is already given in the CE marking information, it does not need to be repeated.

- provisions to which the product conforms (i.e. Annex ZA of this EN) and a copy of the ITT and FPC reports, if relevant;
- particular conditions applicable to the use of the product (e.g. provisions for use under certain conditions);
- number of the accompanying EC Certificate of conformity;

- name of, and position held by, the person empowered to sign the declaration on behalf of the manufacturer or of his authorised representative.

*(In case of products under system 3):* When compliance with the conditions of this annex is achieved, the manufacturer or his agent established in the EEA shall prepare and retain a declaration of conformity (EC Declaration of conformity), which entitles the manufacturer to affix the CE marking. This declaration shall include:

- name and address of the manufacturer, or his authorised representative established in the EEA, and place of production;
- description of the product (type, identification, use), and a copy of the information accompanying the CE marking;

NOTE Where some of the information required for the Declaration is already given in the CE marking information, it does not need to be repeated.

- provisions to which the product conforms (i.e. Annex ZA of this EN) and a copy of the ITT and FPC reports, if relevant;
- particular conditions applicable to the use of the product (e.g. provisions for use under certain conditions);
- name and address of the notified laboratory(ies);
- name of, and position held by, the person empowered to sign the declaration on behalf of the manufacturer or his authorised representative.

*(In case of products under system 4):* When compliance with the conditions of this annex is achieved, the manufacturer or his agent established in the EEA shall prepare and retain a declaration of conformity (EC Declaration of conformity), which entitles the manufacturer to affix the CE marking. This declaration shall include:

- name and address of the manufacturer, or his authorised representative established in the EEA, and place of production;
- description of the product (type, identification, use, ...), and a copy of the information accompanying the CE marking;

NOTE Where some of the information required for the Declaration is already given in the CE marking information, it does not need to be repeated.

- provisions to which the product conforms (i.e. Annex ZA of this EN) and a copy of the ITT and FPC reports, if relevant;
- particular conditions applicable to the use of the product (e.g. provisions for use under certain conditions);
- name of, and position held by, the person empowered to sign the declaration on behalf of the manufacturer or of his authorised representative.

The above mentioned declaration and certificate shall be presented in the language or languages accepted in the Member State in which the product is to be used.

### **ZA.3 CE conformity marking**

The manufacturer or his authorised representative established within the EEA is responsible for the affixing of the CE marking. The CE marking symbol to affix shall be in accordance with Directive 93/68/EC.

## EN 14964:2006 (E)

The CE marking and all the accompanying information given below shall be placed on the accompanying commercial documents if it does not appear in full on the product itself, on a label attached to the product or on the packaging. Part of the CE marking shall be placed on the product itself, on a label attached to it or on the packaging, provided it contains the CE marking symbol with the reference to this EN while the complete information appears on the accompanying commercial documents.


The following information on the product and its essential characteristics shall accompany the CE marking symbol:

- identification number of the certification body (only for products under systems 1);
- name or identifying mark and registered address of the producer;
- last two digits of the year in which the marking is affixed;
- number of the EC Certificate of conformity (only for products under systems 1);
- reference to this European Standard, i.e. EN 14964;
- description of the product (intended use, product classification according to 4.2);
- information on the relevant essential characteristics in Tables ZA.1.1 – ZA.1.3:
  - values and, where relevant, level or class to declare for each essential characteristic as indicated in Tables ZA.1.1 to ZA.1.3. When declaring reaction to fire, if the product has been mounted and fixed for testing in representative end use conditions, then these conditions need to be given on a manufacturer's uniquely identifiable technical document. If a wood-based panel is CWFT (see 4.3.2), the declared reaction to fire class needs to be followed by a reference to Table 8 of EN 13986:2004.
  - characteristics against which the “No performance determined” (NPD) option is relevant.

The “No performance determined” (NPD) option may not be used where the characteristic is subject to a threshold level. Otherwise, the NPD option may be used when and where the characteristic, for a given intended use, is not subject to regulatory requirements. Class F is used instead of NPD in the case of reaction to fire.

Figure ZA.1 gives an example of the information to be given on the product, label, packaging and/or commercial documents.



	<i>CE conformity marking, consisting of the "CE"-symbol given in Directive 93/68/EEC</i>
<p><b>AnyCo Ltd, PO Box 21, B-1050</b></p> <p><b>06</b></p>	<p><i>Name or identifying mark and registered address of the producer</i></p> <p><i>Last two digits of the year in which the marking was affixed</i></p>
<p><b>EN 14964</b></p> <p>Rigid underlay, plywood C2</p> <p>Dimensions:</p> <p>Thickness                      10 mm</p> <p>Nominal length                1,2 m</p> <p>Width                            0,6 m</p> <p>Reaction to fire                E</p> <p>Water vapour permeability   <math>\mu = 100</math></p> <p>Class                              OL</p>	<p><i>No. of European Standard</i></p> <p><i>Description of product</i></p> <p><i>and</i></p> <p><i>information on regulated characteristics</i></p>

**Figure ZA.1 — Example CE marking information**

In addition to any specific information relating to dangerous substances shown above, the product should also be accompanied, when and where required and in the appropriate form, by documentation listing any other legislation on dangerous substances for which compliance is claimed, together with any information required by that legislation.

NOTE      European legislation without national derogations need not be mentioned.

## Bibliography

- [1] EN ISO 9001, *Quality management systems — Requirements (ISO 9001:2000)*



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