

# Mandate M/113

MANDATE TO CEN/CENELEC

CONCERNING THE EXECUTION OF STANDARDISATION WORK

FOR HARMONIZED STANDARDS ON

## WOOD-BASED PANELS

RELATED TO THE FOLLOWING END USES

04/33 EXTERNAL WALLS, INTERNAL WALLS AND PARTITIONS

05/33 FLOORS, GALLERIES AND CEILINGS

06/33 PREFABRICATED SYSTEMS FOR FLOORS AND GALLERIES, STAIRS, RAMPS, RAISED ACCES  
FLOORS, ALLUSTRADES AND HANDRAILS, INCLUDING EXTERNAL WORKS

07/33 ROOFS

08/33 FRAME

09/33 EXTERNAL AND INTERNAL DOORS AND WINDOWS, ROOF OPENINGS AND ROOF LIGHTS  
(INCLUDING FIER DOORS AND SHUTTERS)

10/33 SUSPENDE CEILINGS

11/33 EXTERNAL FINISHES OF WALLS AND PARTITIONS

12/33 INTERNAL FINISHES OF WALLS AND PARTITIONS

13/33 FLOOR AND STAIR FINISHES

14/33 CEILING FINISHES

15/33 ROOF FINISHES

## ANNEX 1

FIELD OF APPLICATION

## WOOD-BASED PANELS

LIST OF PRODUCTS INCLUDED IN THE MANDATE TO BE USED IN:

04/33 EXTERNAL WALLS, INTERNAL WALLS AND PARTITIONS

05/33 FLOORS, GALLERIES AND CEILINGS

06/33 PREFABRICATED SYSTEMS FOR FLOORS AND GALLERIES, STAIRS, RAMPS, RAISED ACCES  
FLOORS, BALLUSTRADES AND HANDRAILS, INCLUDING EXTERNAL WORKS

07/33 ROOFS

08/33 FRAME

09/33 EXTERNAL AND INTERNAL DOORS AND WINDOWS, ROOF OPENINGS AND ROOF LIGHTS  
(INCLUDING FIER DOORS AND SHUTTERS)

10/33 SUSPENDE CEILINGS

11/33 EXTERNAL FINISHES OF WALLS AND PARTITIONS

12/33 INTERNAL FINISHES OF WALLS AND PARTITIONS

13/33 FLOOR AND STAIR FINISHES

14/33 CEILING FINISHES

15/33 ROOF FINISHES

FORMS	MATERIALS	PRODUCTS FOR CONSIDERATION
Rigid sheets	solid wood wood veneers wood particles	<b>Wood-based panels - unfaced, overlaid and coated or veneered - in the fom of:</b> <ul style="list-style-type: none"><li>solid wood panels</li></ul>

wood fibers

- multilaminated wood
- laminated veneer lumber (L.V.L.)
- plywood

veneer plywood

wood core plywood

composite plywood

- oriented strand boards (O. S. B.)
- particleboards (chipboards)

resin bonded

cement bonded

- fiberboards

hardboards

mediumboards

softboards

dry process boards - medium density fiberboard (M.D.F.)

bitumen impregnated fibreboards

- mineral bonded boards

Flexible sheets impregnated paper

For overlays - (melamine-  
formaldehyde)  
metal facings

Formless

Adhesives

Resins

Cement

Coatings

Paints

## ANNEX 2

TECHNICAL TERMS OF REFERENCE

# WOOD-BASED PANELS

TO BE USED IN:

04/33 EXTERNAL WALLS, INTERNAL WALLS AND PARTITIONS

05/33 FLOORS, GALLERIES AND CEILINGS

06/33 PREFABRICATED SYSTEMS FOR FLOORS AND GALLERIES, STAIRS, RAMPS, RAISED ACCES  
FLOORS, BALLUSTRADES AND HANDRAILS, INCLUDING EXTERNAL WORKS

07/33 ROOFS

08/33 FRAME

09/33 EXTERNAL AND INTERNAL DOORS AND WINDOWS, ROOF OPENINGS AND ROOF LIGHTS  
(INCLUDING FIER DOORS AND SHUTTERS)

10/33 SUSPENDED CEILINGS

11/33 EXTERNAL FINISHES OF WALLS AND PARTITIONS

12/33 INTERNAL FINISHES OF WALLS AND PARTITIONS

13/33 FLOOR AND STAIR FINISHES

14/33 CEILING FINISHES

15/33 ROOF FINISHES

**A.- WOOD-BASED PANELS for USE as STRUCTURAL components**

**Family and subfamilies**

**1. WOOD-BASED PANELS - UNFACED, OVERLAID AND VENEERED OR COATED - FOR INTERNAL USES**

in the form of solid wood panels, multilaminated wood, L.V.L., plywood; O.S.B.; particleboards (chipboards) either resin or cement bonded; and fiberboards in the form of hardboards, mediumboards, dry process boards or softboards. They may be treated to improve its fire reaction and treated to resist biological attack i.e. fungi and parasites.

Characteristics of the WOOD-BASED PANELS FOR STRUCTURAL INTERNAL USES to be covered by the harmonized standard will be:

E R	PERFORMANCE CHARACTERISTICS	Durability
1	<b>Strength (tension, compression, bending and shear, including punching shear)</b> Stiffness (MOE) Impact resistance Bonding strength Swelling in thickness <i>(for internal uses exposed to humidity only)</i>	
2	<b>Reaction to fire</b> <i>(for exposed panels in uses subject to reaction to fire requirements)</i> Fire resistance R, E and I <i>(for uses in fire compartmentation)</i> Fire resistance M (Impact) <i>(for uses in fire compartmentation)</i>	<b>Y</b> <i>(Against biological attack, moisture, creep, ageing,... where relevant)</i>
3	<b>Water vapour permeability</b> <i>(for internal uses in external walls)</i> Release of formaldehyde	
4	<i>(As for ERI)</i>	
5	<b>Airborne sound insulation / [Surface mass]</b> <i>(for uses subject to acoustic insulation regulations)</i> <b>Sound absorption</b> <i>(for uses subject to acoustic conditioning regulations)</i>	
6	<b>Thermal conductivity / [Density]</b> <i>(for uses subject to thermal insulation regulations)</i>	

#### Family and subfamilies

### 2. WOOD-BASED PANELS - UNFACED, OVERLAID AND VENEERED OR COATED - FOR EXTERNAL USES

in the form of solid wood panels, multilaminated wood, L.V.L., plywood; O.S.B.; particleboards (chipboards) either resin or cement bonded; and fiberboards in the form of hardboards, mediumboards, dry process boards or softboards. They may be treated to improve its fire reaction and treated to resist biological attack i.e. fungi and parasites.

Characteristics of these WOOD-BASED PANELS FOR STRUCTURAL EXTERNAL USES to be covered by the harmonized standard will be:

E R	PERFORMANCE CHARACTERISTICS	Durability
1	<b>Strength (tension, compression, bending and shear, including punching shear)</b> Stiffness (MOE) Impact resistance Bonding strength Swelling in thickness	
2	<b>Reaction to fire</b> <i>(for exposed panels in uses subject to reaction to fire requirements)</i> Fire resistance R, E and I <i>(for uses in fire compartmentation)</i> Fire resistance M (Impact) <i>(for uses in fire compartmentation)</i>	<b>Y</b> <i>(Against biological attack, moisture, creep, ageing,... where relevant)</i>
3	<b>Water vapour permeability</b>	
4	<i>(As for ERI)</i>	
5	<b>Airborne sound insulation / [Surface mass]</b> <i>(for uses subject to acoustic insulation regulations)</i>	

6 Thermal conductivity / [Density] (for uses subject to thermal insulation regulations)

**B.- WOOD BASED PANELS for USE as non STRUCTURAL components**

**Family and subfamilies**

**1. WOOD-BASED PANELS - UNFACED, OVERLAID AND VENEERED OR COATED - FOR INTERNAL USES**

in the form of solid wood panels, multilaminated wood, L.V.L., plywood; O.S.B.; particleboards (chipboards) either resin or cement bonded; and fiberboards in the form of hardboards, mediumboards, dry process boards or softboards. They may be treated to improve its fire reaction and treated to resist biological attack i.e. fungi and parasites.

Characteristics of these WOOD-BASED PANELS to be covered by the harmonized standard will be:

<b>E</b>	<b>PERFORMANCE CHARACTERISTICS</b>	<b>Durability</b>
<b>R</b>		
1		
2	<b>Reaction to fire</b> (for exposed panels in uses subject to reaction to fire requirements) <b>Fire resistance E and I</b> (for uses in fire compartmentation) <b>Fire resistance M (Impact)</b> (for uses in fire compartmentation)	<b>Y</b>
3	<b>Water vapour permeability</b> (for internal uses in external walls only)  <b>Release of formaldehyde</b>	(Against biological attack, moisture, creep, ageing,... where relevant)
4	<b>Bonding strength</b>	
5	<b>Airborne sound insulation / [Surface mass]</b> (for uses subject to acoustic insulation regulations) <b>Sound absorption</b> (for uses subject to acoustic conditioning regulations)	
6	<b>Thermal conductivity / [Density]</b> (for uses subject to thermal insulation regulations)	

**Family and subfamilies**

**2. WOOD-BASED PANELS - UNFACED, OVERLAID AND VENEERED OR COATED - FOR EXTERNAL USES**

in the form of solid wood panels, multilaminated wood, L.V.L., plywood; O.S.B.; particleboards (chipboards) either resin or cement bonded; and fiberboards in the form of hardboards, mediumboards, dry process boards or softboards. They may be treated to improve its fire reaction and treated to resist biological attack i.e. fungi and parasites.

Characteristics of these WOOD-BASED PANELS to be covered by the harmonized standard will be:

<b>E</b>	<b>PERFORMANCE CHARACTERISTICS</b>	<b>Durability</b>
<b>R</b>		
1		
2	<b>Reaction to fire</b> (for exposed panels in uses subject to reaction to fire requirements) <b>Fire resistance E and I</b> (for uses in fire compartmentation) <b>Fire resistance M (Impact)</b> (for uses in fire compartmentation)	<b>Y</b>
3	<b>Water vapour permeability</b>	(Against biological attack, moisture, creep, ageing,... where relevant)
4	<b>Bonding strength</b>	
5	<b>Airborne sound insulation / [Surface mass]</b> (for uses subject to acoustic insulation regulations)	
6	<b>Thermal conductivity / [Density]</b> (for uses subject to thermal insulation regulations)	

# ANNEX 3

## ATTESTATION OF CONFORMITY

# WOOD-BASED PANELS (1/2)

### 1. Levels and classes for product performances

1.1 According to article 3.2 of the CPD and Clause 1.2.1 of the IDs, a classification of product performance has been identified as the means of expressing the range of requirement levels of the works in respect of **Reaction to fire**. CEN/CENELEC are requested to follow the Commission Decision 94/611/EC [O.J. L 241 of September 1994] and make reference to the standard(s) to be prepared under Commission mandate "Horizontal complement to the 33 mandates in respect of reaction to fire" in dealing with reaction to fire in the specific harmonised product standards to be developed under this mandate.

1.2 Reaction to fire is one performance characteristic for which the need for a classification system for products has been identified for the time being.

Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1). Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

## 2. Systems of attestation of conformity

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

Product(s)	Intended use(s)	Level(s) or class(es) ( <i>Reaction to fire</i> )	Attestation of conformity system(s)
Unfaced, overlaid and veneered or coated wood-based panels	for structural elements in internal or external applications	B - C (2)	1
		B - C (3)	-
		D - E - F	2+

System 1 : See Annex III Section 2 point (i) of Directive 89/106/EEC, without audit-testing of samples

System 2+ : See Annex III Section 2 point (ii) of Directive 89/106/EEC, first possibility, including certification of the factory production control by an approved body on the basis of initial inspection of factory and of factory production control as well as of continuous surveillance, assessment and approval of factory production control

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

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 For products under systems 1, regarding the initial type testing of the product (to be required by the manufacturer in case of system 3) [see Annex III.1.a) of the CPD], the task for the approved laboratory will be limited to the assesment of the following characteristics:

- Euroclass characteristics for reaction to fire, as indicated in the Commission Decision 94/611/EC
- Fire resistance R, (where relevant) E, I and M

3.3 For products under system 1 and 2+, for the continuous surveillance, assesment and approval of the factory production control [see Annex III.1.g) of the CPD], only parameters related to the following characteristics shall be of the interest of the approved body:

- Euroclass characteristics for reaction to fire, as indicated in the Commission Decision 94/611/EC

- **Fire resistance R**, (where relevant) **E, I and M**
- **Strength (tension, compression, bending and shear**, including **punching shear**)
- **Stiffness (M.O.E.)**
- **Impact resistance**
- **Bonding strength**
- **Swelling in thickness**

3.5 For products under systems 1 and 2+, for the initial inspection of the factory and of the factory production control [see Annex III.1.f) of the CPD], parameters related to all the relevant characteristics shall be of the interest of the approved body.

## WOOD-BASED PANELS (2/2)

### 1. Levels and classes for product performances

1.1 According to article 3.2 of the CPD and Clause 1.2.1 of the IDs, a classification of product performance has been identified as the means of expressing the range of requirement levels of the works in respect of **Reaction to fire**. CEN/CENELEC are requested to follow the Commission Decision 94/611/EC [O.J. L 241 of September 1994] and make reference to the standard(s) to be prepared under Commission mandate "Horizontal complement to the 33 mandates in respect of reaction to fire" in dealing with reaction to fire in the specific harmonised product standards to be developed under this mandate.

1.2 Reaction to fire is one performance characteristic for which the need for a classification system for products has been identified for the time being.

Further needs may be identified on the basis of differences specified in Article 3 (2) of the CPD, which are justified in conformity with Community law (IDs Clause 1.2.1). Where for such needs it is recognised that a classification of product performance is the means of expressing the range of requirement levels of the works, the Commission will give the appropriate guidance or will request CEN/CENELEC to make the appropriate proposal through a modification to this mandate.

## 2. Systems of attestation of conformity

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

Product(s)	Intended use(s)	Level(s) or class(es) ( <i>Reaction to fire</i> )	Attestation of conformity system(s)
unfaced, overlaid and veneered or coated wood-based panels	for non structural elements in internal or external applications	B - C (4)	<b>1</b>
		B - C (5)	-
		D - E - F	<b>3</b>
			<b>4</b>

System 1 : See Annex III Section 2 point (i) of Directive 89/106/EEC, without audit-testing of samples

System 3 : See Annex III Section 2 point (ii) of Directive 89/106/EEC, second possibility

System 4: See Annex III Section 2 point (ii) of Directive 89/106/EEC, third possibility

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

3.1 The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic [see Article 2.1 of the CPD and, where applicable, clause 1.2.3 of the Interpretative Documents]. In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

3.2 For products under systems 1 and 3, regarding the initial type testing of the product (to be required by the manufacturer in case of system 3) [see Annex III.1.a) of the CPD], the task for the approved laboratory will be limited to the assesment of the following characteristics:

- **Euroclass characteristics for reaction to fire**, as indicated in the Commission Decision 94/611/EC

- **Fire resistance E, I and M**

3.3 For products under system 1, for the continuous surveillance, assesment and approval of the factory production control [see Annex III.1.g) of the CPD],only parameters related to the following characteristics shall be of the interest of the approved body:

- **Euroclass characteristics for reaction to fire**, as indicated in the Commission Decision 94/611/EC

- **Fire resistance E, I and M**

3.4 For products under systems 1, for the initial inspection of the factory and of the factory production control [see Annex III.1.f) of the CPD], parameters related to all the relevant characteristics shall be of the interest of the approved body.

## ANNEX 4

### DANGEROUS SUBSTANCES

## WOOD-BASED PANELS

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

This results from the Interpretative Documents, where it is noted, in the introduction note to all six of them, that:  
*"Concerning dangerous substances which are in construction products, classes and/or levels of performance to which technical specifications will refer, shall allow the levels of protection needed by the works to be guaranteed, taking into account the purpose of the works."*

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

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

**(1) O.J N·C 62, 28.02.1994**

**(2)also for which the reaction to fire performance is susceptible to change during the production process through the addition of chemical substances**

**(3)ials for which the reaction to fire performance is not susceptible to change during the production process.**

**(4)als for which the reaction to fire performance is susceptible to change during the production process through the addition of chemical substances.**

**(5)ials for which the reaction to fire performance is not susceptible to change during the production process.**