



EUROPEAN COMMISSION  
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

New Approach Industries, Tourism and CSR  
**Construction, Pressure Equipment, Metrology**

Brussels, 27<sup>th</sup> May 2009

**M/444 EN**

## **AMENDMENT TO:**

MANDATE M/113 TO CEN/CENELEC  
CONCERNING THE EXECUTION OF STANDARDISATION WORK  
FOR HARMONISED STANDARDS ON

**WOOD-BASED PANELS**

### **Explanatory note**

Following the request introduced by Finland of an amendment of mandate M 113 issued to CEN/CENELEC (CONSTRUCT 05/720) and based on the existence of a national regulation in which the characteristic “racking/embedment strength” is needed for wood-based panels for use as structural components and the characteristic "air permeability" is needed for use as non-structural component for external uses, the Commission service submits to SCC the amendment (highlighted by track changes) of the above-mentioned mandate as follows.

### **This amendment modifies the original mandate in the following manner:**

The Annex 2, the table of the characteristics and the clause 3.3 of the Annex 3 of the mandate to CEN/CENELEC on **WOOD-BASED PANELS** shall be modified as indicated in Annex A of this amendment.

## ANNEX A

### **Introduction:**

The Annex 2, the table of the characteristics and the Annex 3 of the original mandate needs to be amended as follows.

### **AMENDMENT TO ANNEX 2 OF MANDATE**

*The tables of characteristics of the product families:*

*- A. Wood-based panels for use as structural components, family “1. Wood-based panels - Unfaced, overlaid and veneered or coated - For internal uses” and “2. Wood-based panels - Unfaced, overlaid and veneered or coated - For external uses”*

*- B. Wood-based panels for use as non-structural components, family “1. Wood-based panels - Unfaced, overlaid and veneered or coated - For internal uses” and “2. Wood-based panels - Unfaced, overlaid and veneered or coated - For external uses”*

*in Annex 2 of the Mandate given to CEN/CENELEC are replaced by the following tables.*

<b>A. WOOD-BASED PANELS FOR USE AS STRUCTURAL COMPONENTS</b>
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FAMILY AND SUBFAMILIES

<b>1. WOOD-BASED PANELS UNFACED, OVERLAID AND VENEERED OR COATED - FOR INTERNAL USES</b> 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.
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Characteristics of the WOOD-BASED PANELS FOR STRUCTURAL INTERNAL USES to be covered by the harmonised standard will be:

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

**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 to be covered by the harmonised standard will be:

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

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

**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 R</b>	<b>PERFORMANCE CHARACTERISTICS</b>	<b>Durability</b>
<b>1</b>		<b>Y</b> (Against biological attack, moisture, creep, ageing,... where relevant)
<b>2</b>	<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>3</b>	<b>Water vapour permeability</b>	
<b>4</b>	<b>Bonding strength</b>	
<b>5</b>	<b>Airborne sound insulation / [Surface mass]</b> (for uses subject to acoustic insulation regulations)	
<b>6</b>	<b>Thermal conductivity / [Density]</b> (for uses subject to thermal insulation regulations) <b>Air permeability</b>	

### AMENDMENT TO ANNEX 3 OF MANDATE

*The list of the characteristics of the interest of the approved body in clause 3.3 of Annex 3 of the Mandate given to CEN/CENELEC is replaced by the following.*

- **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**
- **Racking resistance**
- **Embedment strength**
- **Swelling in thickness**