COMMISSION

COMMISSION DECISION

of 6 March 2006

establishing the classes of reaction-to-fire performance for certain construction products as regards wood flooring and solid wood panelling and cladding

(notified under document number C(2006) 655)

(Text with EEA relevance)

(2006/213/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to 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 ([1]), and in particular Article 20(2) thereof,

Whereas:

(1) Directive 89/106/EEC envisages that in order to take account of different levels of protection for construction works at national, regional or local level, it may be necessary to establish in the interpretative documents classes corresponding to the performance of products in respect of each essential requirement. Those documents have been published as the 'Communication of the Commission with regard to the interpretative documents of Directive 89/106/EEC' ([2]).

(2) With respect to the essential requirement of safety in the event of fire, interpretative document No 2 lists a number of interrelated measures which together define the fire safety strategy to be variously developed in the Member States.

(3) Interpretative document No 2 identifies one of those measures as the limitation of the generation and spread of fire and smoke within a given area by limiting the potential of construction products to contribute to the full development of a fire.

(4) The level of that limitation may be expressed only in terms of the different levels of reaction-to-fire performance of the products in their end-use application;

(5) By way of harmonised solution, a system of classes was adopted in Commission Decision 2000/147/EC of 8 February 2000 implementing Council Directive 89/106/EEC as regards the classification of the reaction-to-fire performance of construction products ([3]).

(6) In the case of wood flooring and solid wood panelling and cladding it is necessary to use the classification established in Decision 2000/147/EC.

(7) The reaction-to-fire performance of many construction products and/or materials, within the classification provided for in Decision 2000/147/EC, is well established and sufficiently well known to fire regulators in Member States that they do not require testing for this particular performance characteristic.

(8) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on Construction,

HAS ADOPTED THIS DECISION:

Article 1

The construction products and/or materials which satisfy all the requirements of the performance characteristic 'reaction to fire' without need for further testing are set out in the Annex.

Article 2

The specific classes to be applied to different construction products and/or materials, within the reaction-to-fire classification adopted in Decision 2000/147/EC, are set out in the Annex to this Decision.

([1]) OJ L 40, 11.2.1989, p. 12. Directive as last amended by Regulation (EC) No 1882/2003 of the European Parliament and the Council (OJ L 284, 31.10.2003, p. 1).

([2]) OJ C 62, 28.2.1994, p. 1.

([3]) OJ L 50 23.2.2000, p. 14. Decision as amended by Decision 2003/632/EC (OJ L 220, 3.9.2003, p. 5).

Article 3

Products shall be considered in relation to their end-use application, where relevant.

Article 4

This Decision is addressed to the Member States.

Done at Brussels, 6 March 2006.

For the Commission
Günter VERHEUGEN
Vice-President

ANNEX

The tables set out in this Annex, list construction products and/or materials which satisfy all of the requirements for the performance characteristic reaction to fire without need for testing.

Table 1

CLASSES OF REACTION TO FIRE PERFORMANCE FOR WOOD FLOORING

Material (1), (7)	Product detail (4)	Minimum mean density (5) (kg/m^3)	Minimum overall thickness (mm)	End-use condition	Class (3) for floorings
Wood flooring and parquet	Solid flooring of oak or beech with surface coating	Beech: 680 Oak: 650	8	Glued to substrate (6)	C_{fl} - s1
	Solid flooring of oak, beech or spruce and with surface coating	Beech: 680 Oak: 650 Spruce: 450	20	With or without air gap underneath	
	Solid wood flooring with surface coating and not specified above	390	8	Without air gap underneath	D_{fl} - s1
			20	With or without air gap underneath	
Wood parquet	Multilayer parquet with a top layer of oak of at least 5 mm thickness and with surface coating	650 (top layer)	10	Glued to substrate (6)	C_{fl} - s1
			14 (2)	With or without air gap underneath	
	Multilayer parquet with surface coating and not specified above	500	8	Glued to substrate	D_{fl} - s1
			10	Without air gap underneath	
			14 (2)	With or without air gap underneath	
Veneered floor covering	Veneered floor covering with surface coating	800	6 (2)	Without air gap underneath	D_{fl} - s1

(1) Mounted in accordance with EN ISO 9239-1, on a substrate of at least Class D - s2, d0 and with minimum density of 400 kg/m^3 or with an air gap underneath.
(2) An interlayer of at least Class E and with maximum thickness 3 mm may be included in applications without an air gap, for parquet products with 14 mm thickness or more and for veneered floor coverings.
(3) Class as provided for in Commission Decision 2000/147/EC Annex Table 2.
(4) Type and quantity of surface coatings included are acrylic, polyurethane or soap, 50 - 100 g/m^2, and oil, 20 - 60 g/m^2.
(5) Conditioned according to EN 13238 (50 % RH 23 °C).
(6) Substrate at least Class A2 - s1, d0.
(7) Applies also to steps of stairs.

Table 2

CLASSES OF REACTION TO FIRE PERFORMANCE FOR SOLID WOOD PANELLING AND CLADDING

Material ([11])	Product detail ([5])	Minimum mean density ([6]) (kg/m^3)	Minimum thicknesses, total/ minimum ([7]) (mm)	End-use condition ([4])	Class ([3])
Panelling and cladding ([1])	Wood pieces with or without tongue and groove and with or without profiled surface	390	9/6	Without air gap or with closed air gap behind	D - s2, d2
			12/8		D - s2, d0
Panelling and cladding ([2])	Wood pieces with or without tongue and groove and with or without profiled surface	390	9/6	With open air gap ≤ 20 mm behind	D - s2, d0
			18/12	Without air gap or with open air gap behind	
Wood ribbon elements ([8])	Wood pieces mounted on a support frame ([9])	390	18	Surrounded by open air on all sides ([10])	D - s2, d0

([1]) Mounted mechanically on a wood batten support frame, with the gap closed or filled with a substrate of at least class A2 - s1, d0 with minimum density of 10 kg/m^3 or filled with a substrate of cellulose insulation material of at least class E and with or without a vapour barrier behind. The wood product shall be designed to be mounted without open joints.

([2]) Mounted mechanically on a wood batten support frame, with or without an open air gap behind. The wood product shall be designed to be mounted without open joints.

([3]) Class as provided for in Table 1 of the Annex to Commission Decision 2000/147/EC.

([4]) An open air gap may include possibility for ventilation behind the product, while a closed air gap will exclude such ventilation. The substrate behind the air gap must be of at least class A2 - s1, d0 with a minimum density of 10 kg/m^3. Behind a closed air gap of maximum 20 mm and with vertical wood pieces, the substrate may be of at least class D - s2, d0.

([5]) Joints include all types of joints, e.g. butt joints and tongue and groove joints.

([6]) Conditioned according to EN 13238.

([7]) As illustrated in Figure a below. Profiled area of the exposed side of the panel not more than 20 % of the plane area, or 25 % if measured at both exposed and unexposed side of the panel. For butt joints, the larger thickness applies at the joint interface.

([8]) Rectangular wood pieces, with or without rounded corners, mounted horizontally or vertically on a support frame and surrounded by air on all sides, mainly used close to other building elements, both in interior and exterior applications.

([9]) Maximum exposed area (all sides of rectangular wood pieces and wood support frame) not more than 110 % of the total plane area, see Figure b.

([10]) Other building elements closer than 100 mm from the wood ribbon element (excluding its support frame) must be of at least class A2 - s1, d0, at distances 100 - 300 mm of at least class B - s1, d0 and at distances more than 300 mm of at least class D - s2, d0.

([11]) Applies also to stairs.

Figure a

Profiles for solid wood panelling and cladding

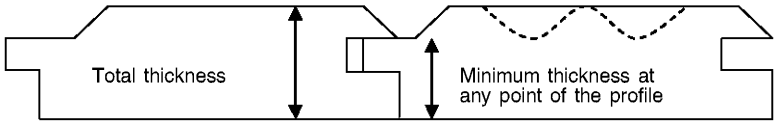
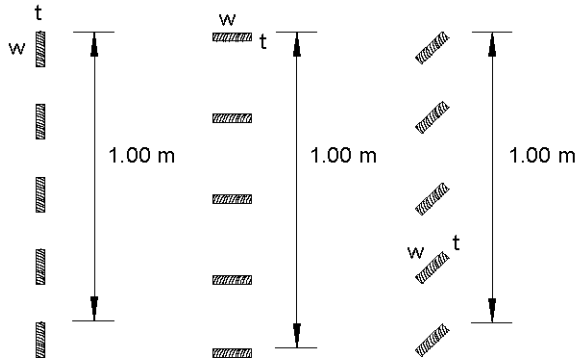


Figure b

Maximum exposed area of wood ribbon element $2n\,(t + w) + a \leq 1{,}10$



n = number of wood pieces per meter
t = thickness of each wood piece, in meter
w = width of each wood piece, in meter
a = exposed area of wood support frame (if any), in m^2, per m^2 of wood ribbon element