INTERNATIONAL STANDARD

ISO 2426-2

First edition
2000-12-01

Plywood — Classification by surface appearance —

Part 2: **Hardwood**

Contreplaqué — Classification selon l'aspect des faces —

Partie 2: Bois feuillus

Reference number
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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 2426 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 2426-2 was prepared by Technical Committee ISO/TC 89, *Wood-based panels*, Subcommittee SC 3, *Plywood*.

This first edition of ISO 2426-2, together with ISO 2426-1 and ISO 2426-3, cancels and replaces ISO 2426:1974, of which it constitutes a technical revision.

ISO 2426 consists of the following parts, under the general title *Plywood — Classification by surface appearance*:

— *Part 1: General*

— *Part 2: Hardwood*

— *Part 3: Softwood*

Plywood — Classification by surface appearance —

Part 2:
Hardwood

1 Scope

This part of ISO 2426 specifies the nature and limits of characteristics inherent in wood and manufacturing defects enabling the visual assessment of the plywood for allocation to an appearance class.

This part of ISO 2426 applies to plywood, the surface veneers of which are made from hardwood species[1)].

It does not apply to overlaid panels.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 2426. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 2426 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2426-1, *Plywood — Classification by surface appearance — Part 1: General*.

3 Classification by surface appearance

3.1 Appearance classes

Assessment of characteristics and defects for determination of appearance class shall be carried out in accordance with ISO 2426-1. Surface classification shall be based on the permissible characteristics and defects within each of the appearance classes as specified in 3.2.

3.2 Permissible characteristics and defects

3.2.1 General

Each surface shall be individually assigned to one of the appearance classes E, I, II, III or IV, as defined by the permissible characteristics according to Table 1 and permissible defects according to Table 2.

1) Conventionally, broadleaved species.

3.2.2 Characteristics inherent in wood

Classification according to characteristics inherent in wood is given in Table 1.

Table 1

Categories of characteristics			Appearance class				
			E	I	II	III	IV
3.2.2.1	Pin knots[a]		Practically absent	$3/m^2$ permitted	Permitted		
3.2.2.2	Sound intergrown knots			Permitted up to an individual diameter of:			Permitted, but see Note
				15 mm provided their cumulative diameter does not exceed 30 mm/m^2	35 mm	50 mm	
				Such knots may have splits provided they are			
				very slight	slight		
3.2.2.3	Unsound or non-adhering knots and knot holes			Permitted up to an individual diameter of:			Permitted, but see Note
				6 mm if filled and up to a number of $2/m^2$	5 mm if unrepaired 10 mm if filled and up to a number of $3/m^2$	40 mm	
3.2.2.4	Splits	Open		Permitted if less than:			Permitted, but see Note
				1/10	1/5	1/3	
				of panel length up to an individual width of:			
				3 mm	5 mm	20 mm	
				and up to a number of:			
				3/m	3/m	3/m	
				of panel width			
				if properly filled		if unrepaired or unlimited if all filled	
		Closed		Permitted			
3.2.2.5	Abnormalities due to insects, marine borers and parasitic plants		Not permitted	Not permitted	Marks of parasitic plants not permitted. Insects and marine borer holes permitted up to a:		Permitted, but see Note
					diameter of 3 mm vertically to the plane of the panel up to a number of $10/m^2$	width of 15 mm and length of 60 mm up to a number of $3/m^2$	
3.2.2.6	Inbark			Not permitted	Permitted up to a width of:		Permitted, but see Note
					5 mm if properly filled	25 mm	
3.2.2.7	Irregularities in the structure of the wood		Practically absent	Permitted		Permitted	
				if very slight	if slight		
3.2.2.8	Discoloration which is not wood-destroying			Permitted if low contrast		Permitted	
3.2.2.9	Fungal decay which is wood-destroying		Not permitted				
3.2.2.10	Other characteristics		Pratically absent	To be considered under the category which they most closely resemble			

NOTE Characteristics inherent to wood are permitted provided that they do not impair the serviceability of the panel.

[a] Pin knots: sound intergrown knots of no more than 3 mm diameter.

3.2.3 Manufacturing defects

Classification according to manufacturing defects is given in Table 2.

Table 2

Categories of defect		Appearance class				
		E	I	II	III	IV
3.2.3.1	Open joints	Not permitted	Not permitted	Permitted up to a width of: 3 mm; and up to a number of: 1/m; of panel width with joints filled if more than 1 mm in width	5 mm; 2/m; unfilled	25 mm; unlimited; unfilled
3.2.3.2	Overlaps		Not permitted	Permitted up to a number of $1/m^2$ and up to 100 mm length	Permitted up to a number of $2/m^2$	Permitted but see Note
3.2.3.3	Blisters		Not permitted			
3.2.3.4	Hollows, imprints and bumps		Not permitted	Permitted if slight	Permitted	
3.2.3.5	Roughness		Not permitted	Permitted if slight	Permitted	
3.2.3.6	Sanding through		Not permitted		Permitted up to an extent of panel surface of: 1 %	5 % but see Note
3.2.3.7	Glue penetration		Not permitted	Permitted if slight and occasional	Permitted up to an extent of 5 % of panel surface	Permitted, but see Note
3.2.3.8	Foreign particles	Not permitted	Not permitted	Ferrous particles not permitted		
3.2.3.9	Repairs: 1) Patches 2) Shims	Practically without defects	Permitted if properly made and tightly filled up to number of: $3/m^2$	$6/m^2$	unlimited	
	3) Synthetic fillers	Not permitted	Not permitted	Permitted within the limits specified in the categories		unlimited
3.2.3.10	Defects at the edges of the panel due to sanding or sawing	Practically without defects	2 mm	Permitted up to 5 mm from the edge		Permitted, but see Note
3.2.3.11	Other characteristics or defects		To be considered under the category which they most closely resemble			
NOTE Manufacturing defects are permitted provided that they do not impair the serviceability of the panel.						

Bibliography

[1] ISO 1096, *Plywood — Classification*.

[2] ISO 2074, *Plywood — Vocabulary*.

[3] ISO 2426-3, *Plywood — Classification by surface appearance — Part 3: Softwood*.