INTERNATIONAL STANDARD

ISO 2426-3

First edition
2000-12-01

Plywood — Classification by surface appearance —

Part 3: **Softwood**

Contreplaqué — Classification selon l'aspect des faces —

Partie 3: Bois résineux

Reference number
ISO 2426-3:2000(E)

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Foreword

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

This first edition of ISO 2426-3, together with ISO 2426-1 and ISO 2426-2, 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 3: Softwood

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 softwood species. 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 detemination 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 indivually 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.

3.2.2 Characteristics inherent in wood

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

Table 1

<table>
<tr><th colspan="3" rowspan="2">Categories of characteristics</th><th colspan="5">Appearance class</th></tr>
<tr><th>E</th><th>I</th><th>II</th><th>III</th><th>IV</th></tr>
<tr><td>3.2.2.1</td><td colspan="2">Pin knots[a]</td><td rowspan="6">Practically absent</td><td>3/m² permitted</td><td colspan="3">Permitted</td></tr>
<tr><td>3.2.2.2</td><td colspan="2">Sound intergrown knots</td><td colspan="3">Permitted up to an individual diameter of:
15 mm provided their cumulative diameter does not exceed 30 mm/m² | 50 mm | 60 mm
Such knots may have splits provided they are
very slight | slight</td><td>Permitted, but see Note</td></tr>
<tr><td>3.2.2.3</td><td colspan="2">Unsound or non-adhering knots and knot holes</td><td colspan="3">Permitted up to an individual diameter of:
6 mm if filled and up to a number of 2/m² | 5 mm if unrepaired 25 mm if filled and up to a number of 6/m² | 40 mm</td><td>Permitted, but see Note</td></tr>
<tr><td rowspan="2">3.2.2.4</td><td rowspan="2">Splits</td><td>Open</td><td colspan="3">Permitted if less than:
1/10 | 1/3 | 1/2
of panel length up to an individual width of:
3 mm | 10 mm | 15 mm
and up to a number of:
3/m | 3/m | 3/m
of panel width
if properly filled | All splits greater than 2 mm in width to be filled</td><td>Length unlimited
25 mm
unlimited</td></tr>
<tr><td>Closed</td><td colspan="4">Permitted</td></tr>
<tr><td>3.2.2.5</td><td colspan="2">Abnormalities due to insects, marine borers and parasitic plants</td><td rowspan="3">Not permitted</td><td>Not permitted</td><td>Marks of parasitic plants not permitted. Insects and marine borer holes permitted up to a:
diameter of 3 mm vertically to the plane of the panel up to a number of 10/m² | width of 15 mm and length of 60 mm up to a number of 3/m²</td><td>Permitted, but see Note</td></tr>
<tr><td>3.2.2.6</td><td colspan="2">Resin pockets and inbark</td><td>Not permitted</td><td>Permitted up to a width of:
6 mm if properly filled | 40 mm</td><td>Permitted, but see Note</td></tr>
<tr><td></td><td colspan="2">Resin streaks</td><td>Not permitted</td><td>Permitted if slight</td><td colspan="2">Permitted</td></tr>
<tr><td>3.2.2.7</td><td colspan="2">Irregularities in the structure of the wood</td><td rowspan="2">Practically absent</td><td colspan="2">Permitted
if very slight | if slight</td><td colspan="2">Permitted</td></tr>
<tr><td>3.2.2.8</td><td colspan="2">Discoloration which is not wood- destroying</td><td colspan="2">Permitted if low contrast</td><td colspan="2">Permitted</td></tr>
<tr><td>3.2.2.9</td><td colspan="2">Fungal decay wood-destroying</td><td>Not permitted</td><td colspan="4">Not permitted</td></tr>
<tr><td>3.2.2.10</td><td colspan="2">Other characteristics</td><td>Practically absent</td><td colspan="4">To be considered under the category which they most closely resemble</td></tr>
<tr><td colspan="7">NOTE Characteristics inherent to wood are permitted provided that they do not impair the serviceability of the panel.</td></tr>
<tr><td colspan="7">[a] Pin knots: sound intergrown knots of no more than 3 mm diameter.</td></tr>
</table>

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	10 mm / 2/m / unfilled	25 mm / unlimited / unfilled
3.2.3.2	Overlaps			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			Permitted if slight	Permitted	
3.2.3.5	Roughness			Permitted if slight	Permitted	
3.2.3.6	Sanding through			Not permitted	Permitted up to an extent of: 1 % of panel surface	5 % but see Note
3.2.3.7	Glue penetration			Permitted: if slight and occasional	up to an extent of 5 % of the 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: $5/m^2$	unlimited		
	3) Synthetic fillers	Not permitted	Not permitted	Permitted within limits of the category which it most closely resembles		
3.2.3.10	Defects at the panel edges due to sanding or sawing	Practically without defects	Permitted up to: 2 mm from the edge	5 mm from the edge	5 mm from the edge	Permitted, but see Note
3.2.3.11	Other 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 2426-2, *Plywood — Classification by surface appearance — Part 2: Hardwood*.

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