
INTERNATIONAL STANDARD



2428

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Plywood — Veneer plywood with rotary cut veneer for general use — Classification by appearance of panels with outer veneers of birch

Contreplaqué — Contreplaqué à plis, avec placages déroulés, pour usage général — Classification, selon l'aspect, des panneaux à placages extérieurs de bouleau

ITeH STANDARD PREVIEW

(standards.iteh.ai)

First edition — 1974-11-01

[ISO 2428:1974](#)

<https://standards.iteh.ai/catalog/standards/sist/3b8ba21a-ba60-43af-9821-2011c2c70747/iso-2428-1974>

UDC 674.243.004.11

Ref. No. ISO 2428-1974 (E)

Descriptors : plywood, birch wood, classification, defects, visual inspection.

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2428 was drawn up by Technical Committee ISO/TC 139, *Plywood*, and circulated to the Member Bodies in November 1971.

It has been approved by the Member Bodies of the following countries :

Australia	India	Spain
Austria	Italy	Sweden
Belgium	Netherlands	Thailand
Canada	New Zealand	Turkey
Czechoslovakia	Norway	United Kingdom
Egypt, Arab Rep. of	Portugal	U.S.S. R.
Germany	Romania	Yugoslavia
Hungary	South Africa, Rep. of	

The Member Body of the following country expressed disapproval of the document on technical grounds :

France

Plywood – Veneer plywood with rotary cut veneer for general use – Classification by appearance of panels with outer veneers of birch

iTeh STANDARD PREVIEW (standards.iteh.ai)

1 SCOPE AND FIELD OF APPLICATION

This International Standard establishes the permissible defects for the classification by appearance of surfaces of general purpose veneer plywood¹⁾ with rotary cut outer veneers of birch.

NOTE – Species of birch wood used for this purpose are indicated in the annex.

2 REFERENCE

ISO 2426, *Plywood – Veneer plywood with rotary cut veneer for general use – General rules for classification by appearance.*

3 CLASSIFICATION BY APPEARANCE

3.1 Classification of panels by appearance according to the combination of the grades of their two surfaces should be carried out in accordance with ISO 2426.

3.2 The surface of the panels should be classified by appearance based on the permissible defects laid down in clause 4.

4 PERMISSIBLE DEFECTS

Each surface is individually classified in one of the grades E, I, II, III or IV as defined by the permissible defects indicated in the following table.

1) Defined in ISO 2074, *Plywood – Vocabulary.*

PERMISSIBLE DEFECTS

Categories of defects		Grade					
		E	I	II	III	IV	
4.1.1	Pin knots	Practically without defects (see ISO 2426)	in number up to 3 per m ²	permitted without restriction		Veneers shall be free from rot and must be well glued. Defects inherent in wood and manufacturing defects are permitted provided they do not impair the mechanical properties and serviceability of the panel.	
4.1.2	Sound intergrown knots		permitted up to an individual maximum diameter of 6 mm provided their cumulative diameter does not exceed 12 mm per m ²	20 mm 50 mm per m ² and if properly filled	25 mm 60 mm per m ²		
4.1.3	Unsound or non-adhering knots and holes		excluded	permitted up to a maximum individual diameter of 10 mm provided their cumulative diameter does not exceed 25 mm per m ² and if properly filled			
4.1.4	Irregularities in the structure of the wood		permitted if very slight	permitted if slight	permitted		
4.1.5	Splits and Checks		open	excluded	permitted, if properly filled, up to an individual maximum width of 2 mm and up to an individual maximum length of 200 mm and in number up to 1 per metre of panel width		
			closed	permitted, if properly filled, of an individual maximum length up to 100 mm and in number up to 1 per metre of panel width			
4.1.6	Inbark		excluded				
4.1.7	Defects due to borers and parasitic plants	excluded					

PERMISSIBLE DEFECTS (concluded)

	Categories of defects	Grade				
		E	I	II	III	IV
4.1.8	Sound discoloration	Practically without defects (see ISO 2426)	permitted if very slight	permitted		Veneers shall be free from rot and must be well glued. Defects inherent in wood and manufacturing defects are permitted provided they do not impair the mechanical properties and serviceability of the panel.
4.1.9	Unsound discoloration and decay		excluded			
4.1.10	Open joints		excluded	permitted at the edges of the panel, if properly filled, in number no more than 1, and in maximum width up to 1 mm per metre of panel width		
4.1.11	Overlaps		excluded	permitted of a maximum length of 250 mm and in number up to 1 per m ²		
4.1.12	Blisters		excluded			
4.1.13	Hollows, bumps and imprints		excluded	permitted if very slight	permitted if slight	
4.1.14	Roughness		excluded	permitted if very slight	permitted if slight	
4.1.15	Sanding through		excluded	permitted up to an extent of 1 000 mm ² per m ² of panel surface		
4.1.16	Glue penetration		excluded	permitted if slight and occasional	permitted up to an extent of 5 % of the panel surface	
4.1.17	Inserts — patch — shim		excluded	permitted, if properly made, up to a maximum of 1 per m ² and of cumulative area not exceeding 0,15 % of total panel surface	without limitation 3 %	
4.1.18	Inclusions of aluminium clips		excluded	permitted		
4.1.19	Defects at the edges of the panel due to — sanding or — sawing		2 mm	permitted up to 5 mm from the edge	5 mm	
4.1.20	Other defects which are not indicated		To be considered under the heading of the category of defect most similar to it			

iTeh STANDARD PREVIEW
(standards.iteh.ai)
ISO 2428:1974
https://standards.iteh.ai/catalog/standards/sist/3b8ba21a-ba60-43af-9821-201c2c70747/iso-2428-1974

ANNEX

LIST OF THE DIFFERENT TYPES OF BIRCH USED FOR THE MANUFACTURE OF VENEER PLYWOOD

No.	Botanical name	Commercial name	Source of supply
1	<i>Betula verrucosa</i> EHRH	Birch	Europe U.S.S.R.
2	<i>Betula pubescens (odorata)</i> EHRH	Birch	Europe U.S.S.R.
3	<i>Betula alleghaniensis</i>	Yellow birch	North America
4	<i>Betula papyrifera</i>	White birch	North America
5	<i>Betula lutea</i>	Yellow birch	North America

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 2428:1974

<https://standards.iteh.ai/catalog/standards/sist/3b8ba21a-ba60-43af-9821-2011c2c70747/iso-2428-1974>

iTeh STANDARD PREVIEW

This page intentionally left blank
(standards.iteh.ai)

[ISO 2428:1974](#)

<https://standards.iteh.ai/catalog/standards/sist/3b8ba21a-ba60-43af-9821-2011c2c70747/iso-2428-1974>

iTeh STANDARD PREVIEW

This page intentionally left blank
(standards.iteh.ai)

[ISO 2428:1974](#)

<https://standards.iteh.ai/catalog/standards/sist/3b8ba21a-ba60-43af-9821-2011c2c70747/iso-2428-1974>