



DRAFT TANZANIA STANDARD

Plywood — Classification by surface appearance — Part 1: General

TANZANIA BUREAU OF STANDARDS

0. National Foreword

The Tanzania Bureau of Standards is the statutory national standards body for Tanzania, established under standards Act No. 3 of 1975, amended by Act No. 2 of 2009.

This draft Tanzania Standard is being prepared by BCDC 6 Sawn timber, logs and wood-based components Technical Committee under the supervision of the Building and Construction Divisional Committee (BCDC).

This draft Tanzania Standard is a modified adoption of the 2nd Edition of International Standard ISO 2426-1: 2020 *Plywood - Classification by surface appearance - Part 1:General*.

Terminologies and conventions

The text of the International Standard is hereby being recommended for approval with deviation for publication as draft Tanzania standard.

Some terminologies and conventions are not identical with those used in Tanzania Standards; attention is drawn to the following;

The comma has been used as a decimal marker for metric dimensions. In Tanzania, it is current practice to use a full point on the baseline as the decimal marker.

Whenever the words “ISO Standard” appear referring to this standard, they should read as “Tanzania Standard”.

This standard of the International Organization for Standardization (ISO) was approved for publication as a Tanzania Standard with modifications given in the normative Annex.

For the purposes of this standard, the following editorial changes have also been made:

- a) deletion of informative preliminary material from the adopted International Standard
- b) inclusion of national informative material (National foreword, terminologies and conventions)
- c) deletion of the translation text in French to retain English language which is the official national language
- d) changes in document layout (pagination, font type and size)
- e) corrected the word “par” under clause 5.2.1 of ISO 2426-1:2020 to “per”

Plywood — Classification by surface appearance —Part 1: General

1. Scope

This document establishes general rules for the classification of plywood by its surface appearance. It concerns plywood made of hardwood including tropical and temperate hardwood, softwood and plywood derived from other lignocellulosic materials.

It does not apply to overlaid plywood.

2. Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BCDC 6 (58) CD2/ISO 2426-2, *Plywood — Classification by surface appearance — Part 2: Hardwood*
BCDC 6 (59) CD2/ISO 2426-3, *Plywood — Classification by surface appearance — Part 3: Softwood*

3. Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

ISO Online browsing platform: available at <https://www.iso.org/obp>

IEC Electropedia: available at <http://www.electropedia.org/>

4. Classification by surface appearance

4.1 Classes

Classification of plywood by surface appearance is made according to the number and the extent of certain natural characteristics of wood and the defects that come from the manufacturing process. Five appearance classes are distinguished, identified with the following class codes: E, I, II, III, IV.

4.2 Characteristics and defects taken into consideration

4.2.1 Determination of appearance class

Determination of the appearance class, based on the appearance of the panel surfaces, shall take into account the categories of characteristics given in Table 1 and manufacturing defects given in Table 2.

4.2.2 Characteristics inherent in wood

Categories of characteristics inherent in wood are listed in TABLE 1

TABLE 1 — Surface appearance classification of veneer

Category	Type
Pin knots	
Sound intergrown knots	
a) Unsound knots b) Non-adhering and partially adhering Holes, except those due to insects, marine borers and parasitic plants	Dog holes Knot holes
a) Splits b) Checks	Open Closed
Abnormalities due to insects, marine borers and parasitic plants	Small worm holes Large worm holes Marine borer holes Marks from parasitic plants
Resin pockets Resin streaks Inbark	
Irregularities in the structure of the wood ^a	Angle grain Curly grain Interlocked grain Spiral grain
Discoloration which is not wood-destroying	Blue stain, mould and fungal discoloration Coloured sapstain False heartwood Other discoloration such as chemical stain and colour streaks
Fungal decay which is wood-destroying	Rot
Other characteristics	To be considered under the category which they most closely resemble

^a When irregularities of grain result in roughness, these shall be considered as one category of characteristics.

4.2.3 Manufacturing defects

Categories of manufacturing defects are listed in TABLE 2.

TABLE 2 — Surface appearance classification of plywood

Category	Type
Open joints	
Ovelaps	
Blisters	
Hollows	
Imprints	
Bumps	
Roughness, other than that due to irregularities in the structure of the wood	
Sanding through	
Glue penetration	
Foreign particles	Metal, mineral, etc.
Repairs	Patches Shims Synthetic fillers
Defects at the edges of the panel	Sanding defects Sawing defects Missing wood
Other defects	To be considered under the category which they most closely resemble

4.3 Classification by appearance of panels

The appearance class of plywood is determined by the classes of its surfaces.
The class of the plywood first describes the class of the face followed by the class of the back.

5. Rules for classification

5.1 Classification for hardwood and softwood

The permissible characteristics and defects for each of these appearance classes of this document are specified in ISO 2426-2 for hardwood and in ISO 2426-3 for softwood.

5.2 Conditions of admissibility for inherent characteristics of wood and manufacturing defects

5.2.1 General

Characteristics and defects which are limited in number, size, or extent are either enumerated or evaluated over the total surface of the panel. This number or extent is expressed per square metre of panel, with the exception of checks, splits and open joints which are related to one metre of panel width.

BCDC 6 (57) CD2: 2020/ISO 2426-1:2020

The number and the extent of characteristics and defects shall be defined as follows and rounded off to the nearest unit.

a) For knots and holes:

- 1) individual diameter;
- 2) cumulative diameters, expressed per square metre of panel surface.

NOTE The diameter of a knot or hole is conventionally defined as the diameter across the general direction of the grain of the veneer.

b) For checks, splits and open joints:

- 1) individual length;
- 2) individual width;
- 3) number per metre of panel width.

5.2.2 Joints

In appearance classes I to IV, the number and the width of veneers which form the outer plies of a panel are not restricted, provided the joints are well made.

The veneers forming the outer plies of class I shall be well matched for colour and have similar grain.

The outer plies shall be laid with the joints approximately parallel to the edges of the panel.

In class E, the outer ply using rotary-cut veneer may be of one or two veneers provided that the joint is well made, approximately at the centre of the panel, approximately parallel to the edges of the panel and that the veneers are well matched for colour and of similar grain.

5.2.3 Inclusions

The inclusion of foreign particles likely to damage the machining equipment is not permitted.

5.2.4 Repairs

Patches and shims used for the repairs shall fit and be properly fixed. The matching for colour and grain shall be in accordance with the requirements for the appropriate appearance class.

Synthetic filling is permitted, subject to the appearance class requirement.

Annex**Normative changes from the adopted ISO standard**

For the purposes of this draft Tanzania Standard, the following changes have been made from the adopted ISO 2426-1:2020 standard:

TABLE 3 — Normative changes made on this standard from the adopted ISO standard

	Clause/Subclause	Modifications	Explanation
A.1	4.1	Modified the word “codes” to read as “class codes”	to reflect the actual meaning
A.2	4.2.1	modified a word “defects” to read as “manufacturing defects”	to reflect the actual meaning