DRAFT TANZANIA STANDARD

Plywood — Vocabulary

TANZANIA BUREAU OF STANDARDS

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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 2074: 2007 *Plywood — Vocabulary*.

Terminologies and conventions

The text of the International Standard is hereby being recommended for approval without deviation for publication as 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 agreed modifications due to national requirements. A complete list of modifications, together with their justification, is 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)

Plywood — Vocabulary

1. Scope

This draft Tanzania Standard establishes terminologies relating specifically to plywood.

It includes descriptions for terms that might or might not be defined in other standards relating to wood and other wood-based materials.

The descriptions of the terms are intended to provide clarification, and interpretation if necessary, of general terminologies and definitions as they relate to the manufacturers or use of plywood.

2. Plywood types and definitions

2.1 Plywood
Wood-based panel consisting of an assembly of layers typically veneers, glued together with the direction of the grain in adjacent layers usually at right angles.

2.2 Balanced plywood
Plywood in which the outer and inner layers are symmetrical about the centre layers with respect to thickness, grain orientation and mechanical and physical performance or species.

2.3 Veneer plywood
Plywood in which all the layers are made of veneer layers or plies that are glued together with adjacent layers having their wood grain rotated up to 90 degrees to one another.

2.4 Blockboard
Plywood, the core of which is made of strips of solid wood more than 7 mm wide but not wider than 30 mm, which may or may not be glued together.

2.5 Battenboard
Plywood, the core of which is made of strips of solid wood more than 30 mm wide but not wider than 76 mm, which may or may not be glued together.

2.6 Laminboard
Plywood, the core of which is made of strips of veneer, not thicker than 7 mm placed on edge, which are typically glued together.

2.7 Composite plywood
Plywood, the core (or certain layers) of which is made of materials other than solid wood or veneers. There are at least two crossbanded layers on each side of the core.

2.8 Moulded plywood
Plywood whose surface of face or back veneer is not level/horizontal but moulded by pressing in a mould/form/shape.

2.9 Long-grain plywood
Plywood in which the grain of the outermost plies is parallel or nearly parallel to the long edge of the panel.

2.10 Cross-grain plywood
Plywood in which the grain of the outermost plies is parallel or nearly parallel to the short edge of the panel.

2.11 Flat plywood
Plywood whose surface of face or back veneer is level.

3. Elements

3.1 Layer
Either one ply, or two or more plies glued together with their grain direction parallel or a material other than wood.

3.2 Cross band
Inner layer with grain direction at right angles to the outer layers.

3.3 Core
Central layer visible on the edges of the manufactured panel, generally thicker than the outer layers and consisting of:
a) veneers;
b) blocks or strips of wood (e.g battens) placed side by side which are or are not glued together;
c) other wood-based material;
d) other sheet material;
e) cellular construction.

3.4 Veneer
Thin sheet of wood generally not more than 6 mm in thickness.

3.5 Sliced veneer
Veneer that is sliced off by moving a log, bolt, or flitch laterally against a knife or vice versa.

3.6 Rotary-cut veneer
Veneer cut in a continuous ribbon by centering the entire log or bolt in a spindle or spindle less lathe machine and rotating it against a knife.

3.7 Peeled veneer
See clause 3.6.

3.8 Semi rotary-cut veneer
Veneer cut purposely in a non-continuous ribbon by centering the entire log or bolt in a spindle or spindle less lathe machine and rotating it against a knife.

3.9 Sawn veneer
Veneer produced by sawing.

3.10 Ply
In a panel, either one single veneer or two or more veneers joined edge to edge or end to end.

4. Characteristics of a panel

4.1 Surface
Visible part of outermost plies of a plywood exclusive of edge.

4.2 Face
Better-quality surface of a plywood or both surfaces when outer veneers are of equal quality.

4.3 Back face
Opposite surface to the face.

4.4 Length of a plywood panel
Dimension in the direction of the grain of the outermost plies.

4.5 Width of a plywood panel
Dimension in the direction at right angle to the length.

4.6 Thickness of a plywood panel

Dimension perpendicular to the surface of the panel.

4.7 Butt joint
Square-ended joint between two pieces of veneer or panels.

4.8 Scarf joint
Sloping cut joint made at the end of two pieces of veneer or panels.

5. Characteristics of veneers

5.1 Grain
General direction or arrangement of fibres.

5.2 Angle grain
Grain forming an oblique angle with the edges of a ply.

5.3 Spiral grain
Grain that follows a spiral course around the pith.

5.4 Interlocked grain
Characteristic of a wood where the fibres in succeeding growth periods inclined alternately in opposite directions.

5.5 Veining
Network formed by veins of wood on the surface of veneer.

5.6 Curly grain
Grain that follows tight irregular curves.

5.7 Knot
Portion of a branch embedded in the veneer.

5.8 Intergrown knot
Knot which is adhering for at least ¾ of its perimeter with the surrounding veneer.

5.9 Partially intergrown knot
Knot which is adhering for ¼ to ¾ of its perimeter with the surrounding veneer.

5.10 Non-adhering knot
Knot which is adhering for less than ¼ of its perimeter with the surrounding veneer.

5.11 Knot hole
Void produced by the removal of a knot.

5.12 Sound knot
Knot not affected by rot.

5.13 Pin knot
Round or oval knot sound intergrown or partially intergrown with a maximum size of 3 mm.

5.14 Check
Separation of the fibres which does not extend through the thickness of the veneer.

5.15 Split
Separation of the fibres extending through the thickness of the veneer.

5.16 Stain discoloration

Any variation from the natural colour of wood, which is not associated with a loss of strength.

5.17 Resin pocket
Cavity within a veneer containing or that has contained natural wood resin.

5.18 Bark pocket
Cavity within a veneer containing or that has contained bark.

5.19 Fungal decay
Bio-deterioration caused by fungi.

5.20 Resin streak
A long, thin line or mark of resin on veneer which make that part of veneer look different from its surroundings.

6. Manufacturing characteristics of veneers and plywood

6.1 Roughness
Unevenness of the surface due to irregularities of the structure of the wood or due to a manufacturing variation.

6.2 Open joint
Gap between two adjacent elements within a ply.

6.3 Overlap
Overlapping of two adjacent veneers (or two sections of a split veneer) in a ply.

6.4 Blister
Local separation between plies created by no adherence.

6.5 Bump
Local area of over-thickening showing in an outermost ply.

6.6 Hollow
Local depression in an outermost ply.

6.7 Imprint
Local indentation caused by a foreign matter being pressed into a surface.

6.8 Inclusion
Foreign matter embedded in a veneer.

6.9 Bond failure
Failure of the adhesion of two plies.

7. Finishing and shape

7.1 One side sanded plywood
Plywood which is fully sanded on the face to produce a uniformly smooth finish.

7.2 Unsanded plywood
Plywood, the face and back of which have not been smoothed or finished beyond the peeling process.

7.3 Touch-sanded plywood
Plywood, (a) surface(s) of which has (have) been mechanically sanded selectively to remove surface irregularities or repaired materials and/or reduce panel thickness variations.

7.4 Two sides sanded plywood
Plywood which is fully sanded on both surfaces to produce a uniformly smooth finish.

7.5 Scraped plywood
Plywood the face and/or back of which have been smoothed by means of a mechanical scraper.

7.6 Overlaid plywood
Plywood surfaced with one or several overlaid sheets or films as

a) resin impregnated paper;
b) plastic;
c) resin film;
d) metal;
e) decorative paper.

7.7 Pre-finished plywood
Plywood the surface of which is finished with paint, varnish or other surface coatings.

7.8 Textured plywood
Plywood modified by mechanical method to create greater surface relief.

7.9 Veneered plywood
Plywood overlaid by a decorative wood veneer.

7.10 Sanding through
Local absence of the outer ply resulting from excessive sanding which reveals some of the glue line (and/or the underlying ply).

7.11 Glue penetration
Glue which has seeped through the outer ply and which can show up as blemishes.

7.12 Inserting
Repairing of a ply by an element of determinated- shaped-sound veneer, inserted to replace defective portions which have been previously removed.

7.13 Patch plug
Piece of determined shaped veneer for inserting.

7.14 Shim
Piece of long, narrow veneer for inserting.

7.15 Filling
Repairing by filler sealing of open defects.

7.16 Bond
Adhesion between or within plies or layers of a plywood panel.

7.17 Lay-up, construction
Arrangement of layers in a plywood panel.

7.18 Composition
Description of constituent elements of plywood panel.

7.19 Bow
Curvature of a plywood panel across the length or width.

7.20 Twist
Spiral distortion of a plywood panel.

Annex

Normative changes from the adopted ISO standard

For the purposes of this Tanzania Standard, the following changes have been made from the adopted ISO 2074:2007 standard:

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

	Clause/Subclause	Modifications	Explanation
A.1	2	modified clause 2 heading to "plywood types and definitions" **original heading;** plywood types	to reflect the actual content of the clause heading
A.2	2.3	modified a definition for "veneered plywood" **original definition;** "plywood in which all the layers are made of veneers oriented parallel to the plane of the panel"	the term "parallel" used in the original definition does not reflect the practical meaning for the defined term
A.3	2.8	modified definition for "moulded plywood" **original definition;** "plywood which is not flat, made by pressing in a mould"	to reflect a descriptive meaning of the defined term
A.4	2.11	added clause 2.11 "flat plywood" definition	"flat plywood" is among the types of plywood used in industries. As a counterpart its definition is included in this Tanzania standard
A.5	3.6	modified clause 3.6 definition for "rotary-cut veneer" **original definition;** "veneer cut in a continuous ribbon by centering the entire log or bolt in a lathe and rotating it against a knife"	modified the definition to reflect the use of "spindleless lathe machine" which are also used producing "rotary - cut veneer"
A.6	5.20	added clause 5.20 "resin streak" definition	"resin streak" is among the characteristics of veneers not included in adopted ISO standard

