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Vocabulary related to bamboo and bamboo products

Vocabulaire relatif au bambou et aux produits en bambou

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Foreword

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This document was prepared by Technical Committee ISO/TC 296, *Bamboo and Rattan*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Bamboo belongs to the subfamily *Bambusoidae* of the grass family (*Gramineae*/*Poaceae*). There are nearly 1 642 bamboo species, including 1 521 woody bamboos, distributed naturally in tropical and warm temperate areas. There are 3 tribes of bamboos, which are A*rundinarieae* (32 genus); *Bambuseae* tribe (69 genus); and herb-bamboo dominated by *Olyreae* tribe (22 genus)[1]. Depending on the species and growing location, most bamboo species can grow rapidly up to 1,2 m per day[2].

The current utilization of bamboo worldwide is varying from construction to human's various necessities, i.e. handicraft, musical instruments, kitchen utensils, fibre-based products (i.e. textile, shoes, etc.), medicinal treatment, food, etc. Due to increasing bamboo utilization for daily life, harmonization of the terms used is required in order to minimize confusion or conflicts and attain universal understanding.

The terms and descriptions contained in this International Standard have been mainly constituted to represent internationally recognized terms applied to bamboo and bamboo products (semi/intermediate and final). The descriptions of the terms are created for general understanding by the bamboo experts, industry, consumers and other stakeholders.

The sources used during this International Standard development have been the most recent scientific documents and/or standards (international, regional or domestic), either published or under development. Descriptions sourced from standards are worded as closely as possible to that appearing in the standards. However, where necessary modifications have been made for several descriptions following review between standards, a note appears after the term expressing the adaptation of its description from the standards.

Vocabulary related to bamboo and bamboo products

1 Scope

This document defines terms related to bamboo, intermediate bamboo and bamboo products.

This document is applicable to bamboo, intermediate bamboo and bamboo products in production and trade.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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/

3.1 Terms for bamboo

3.1.1
bamboo
tropical, semitropical or temperate fast-growing grass with lignocellulose matrix and usually having hollow culms

Note 1 to entry: Grasses classified within the subfamily *Bambusoideae*, including the temperate woody bamboos (*Arundinarieae*), tropical woody bamboos (*Bambuseae*), and herbaceous bamboos (*Olyreae*).

3.1.2
bamboo culm
single shoot of *bamboo* (3.1.1) comprised of the entire unaltered bamboo cross-section, which is usually a hollow cylinder, except at *bamboo nodes* (3.1.7)

[SOURCE: ISO 22157:2019, 3.1]

3.1.3
bamboo outer layer
hard, compact sheath of *bamboo culm* (3.1.2) which is exposed to the external environment

3.1.4
bamboo inner layer
soft inside layer of the *bamboo culm* (3.1.2), serving as boundary to the hollow central portion of the culm

3.1.5
bamboo culm wall
solid part of *bamboo culm* (3.1.2)

3.1.6
bamboo internode
usually hollow region of *bamboo culm* (3.1.2) between two *nodes* (3.1.7) at which diameter and wall thickness are defined

[SOURCE: ISO 19624:2018, 3.9, modified — The word "bamboo" has been added in the term.]

3.1.7
bamboo node
transverse *diaphragm* (3.1.8) region located along the length of the *bamboo culm* (3.1.2) separating adjacent *internodes* (3.1.6), which, when alive, is a location of leaf growth

[SOURCE: ISO 22157:2019, 3.11, modified — The word "bamboo" has been added in the term and the word "intermittent" has been removed from definition.]

3.1.8
bamboo diaphragm
hard, rigid inner plate inside the bamboo *node* (3.1.7)

3.1.9
bamboo rhizome
underground, segmented part of bamboo from which the bamboo *shoot* (3.1.12) emerges

3.1.10
bamboo culm sheath
usually large, overlapping metamorphosed leaves, borne singly at each node of the culm proper and protect/cover the emerging new shoot/branch in *bamboo* (3.1.1)

3.1.11
bamboo foliage leaves
usually photosynthetic organ of a plant characterized by a sheath and a blade that emerges from the branches

3.1.12
bamboo shoot
young sprout produced by the rhizome of a *bamboo* (3.1.1)

3.1.13
bamboo clump
clump
cluster of *bamboo shoots* (3.1.12) emanating from two or more rhizomes at the same location

[SOURCE: ISO 22157:2019, 3.2]

3.1.14
bamboo plantation
land area in which *bamboo* (3.1.1) is planted and managed

3.1.15
green bamboo
fresh *bamboo culm* (3.1.2) with high moisture content (usually more than 30 %) which has not undergone any treatment

3.2 Terms for intermediate bamboo products

3.2.1
bamboo culm section
certain length of *bamboo culm* (3.1.2) obtained by cross cutting

3.2.2
bamboo split
bamboo piece with *outer* (3.1.3) and *inner layers* (3.1.4) remained, made by a longitudinal cut of a *bamboo culm* (3.1.2) section

3.2.3
bamboo strip
long, thin and flat bamboo piece with rectangular cross section, processed from *bamboo split* (3.2.2) and with the *outer* (3.1.3) and *inner layers* (3.1.4) removed

3.2.4
bamboo sliver
long, thin, and narrow piece cut from *bamboo strip* (3.2.3) or *split* (3.2.2)

3.2.5
flattened bamboo
piece of *bamboo culm* (3.1.2) pressed to level the surface

3.2.6
bamboo interlaced mat
mat made of woven *bamboo slivers* (3.2.4), used for walls, ceiling, and other bamboo-based panel products

3.2.7
bamboo parallel-woven mat or bamboo curtain
mat made of parallel-woven *bamboo slivers* (3.2.4), mainly used for bamboo-based panel products

3.2.8
bamboo fibre bundle strip
pressure rolled *bamboo strip* (3.2.3) or *split* (3.2.4), resulting in cross-linked fibre bundles, used to produce *bamboo scrimber* (3.2.17)

3.2.9
bamboo fibre bundle sheet
mat made of several *bamboo fibre bundle strips* (3.2.8) mainly for *bamboo scrimber* (3.2.17) production

3.2.10
bamboo stick
long, thin *bamboo strip* (3.2.3) with or without sharp pointed end and uniform dimension along its length

3.2.11
bamboo particle
small bamboo elements including flake, needle, granular-like, or strand

3.2.12
bamboo chip
small fragment of bamboo chopped or broken by chipper or hammer mill and mainly used for pulp

3.2.13
bamboo strand
manufactured bamboo element of a predetermined shape with an average length of more than 50 mm and average thickness less than 2 mm

[SOURCE: ISO 16894:2009, 3.1.7, modified — The word "bamboo" has been added in the term and the word "wood" has been replaced by "bamboo" in the definition.]

3.2.14
bamboo fibre
long narrow cell (or bundle of cells) of which *bamboo* (3.1.1) is largely composed

[SOURCE: ISO 24294:2013, 9.18, modified — The word "bamboo" has been added in the term and the word "wood" has been replaced by "bamboo" in the definition.]

3.2.15
bamboo pulp
mixture of mainly cellulose fibres derived from *bamboo* (3.1.1) through chemical, mechanical, biological or combined methods

3.2.16
bamboo flour
fine powder processed from *bamboo culm* (3.1.2), branches or processing residues

3.2.17
bamboo scrimber
panel or lumber made of compressed *bamboo fibre bundle strips* (3.2.8) or compressed *bamboo fibre bundle sheet* (3.2.9)

3.2.18
flattened bamboo board
panels made of *flattened bamboo* (3.2.5)

3.2.19
esterilla
flat element obtained by opening the *bamboo culm* (3.1.2), making non-continuous longitudinal cuts on the *nodes* (3.1.7) and *internodes* (3.1.6) of the bamboo culm

Note 1 to entry: This intermediate bamboo product is widely used in South America for ceiling/roof, wall and floor.

3.3 Terms for bamboo products

3.3.1
bamboo-based panel
assembly of individual elements made of *bamboo* (3.1.1), excluding the *culm* (3.1.2), or a combination of a bamboo top layer and additional sub/middle-layer (s) forming a panel

3.3.1.1
composite bamboo panel
laminated panel consisting of a top layer of *bamboo* (3.1.1) and additional sub/middle-layer (s) made of other materials containing <75 % lignocellulosic materials, glued together

3.3.1.2
bamboo fibreboard
panel made of *bamboo fibre* (3.2.14) glued and compressed together

3.3.1.3
bamboo particleboard
panel made of *bamboo particles* (3.2.11) glued and compressed together

3.3.1.4
ply bamboo
bamboo-panels consisting of an assembly of layers typically *bamboo veneers* (3.3.2), mat, *bundle sheets* (3.2.9), and/or *flattened bamboo* (3.2.5), glued together, with the direction of the grain in adjacent layers usually at right angles

3.3.1.5
bamboo oriented strand board
BOSB
multi-layered panel made from strands of *bamboo* (3.1.1) of predetermined shape and thickness, together with a binder, by the application of pressure and heat, with the strands in the external layers aligned and parallel to the panel length or width

[SOURCE: ISO 17064:2016, 3.3, modified — The word "wood" has been replaced by "bamboo" in the definition.]

3.3.1.6
bamboo concrete formboard
ply bamboo (3.3.1.4) with surface being covered by resin impregnated paper or wood veneer, used for concrete form board

3.3.1.7
decorated bamboo-based panel
bamboo-based panel with decorated surface

3.3.1.8
resin-impregnated paper-faced bamboo-based panel
bamboo-based panel with resin-impregnated paper as surface

3.3.1.9
pvc-faced bamboo-based panel
bamboo-based panel with polyvinylchloride sheet as surface

3.3.1.10
structural bamboo-based panel
bamboo-based panel mainly used in load-carrying applications

3.3.1.11
non-structural bamboo-based panel
bamboo-based panel mainly used in non-load-carrying applications

3.3.1.12
indoor bamboo-based panel
bamboo-based panel made with non-water-resistant resin

3.3.1.13
outdoor bamboo-based panel
bamboo-based panel made with water resistant resin

3.3.1.14
glued laminated bamboo
structural member formed by bonding together *bamboo strips* (3.2.3) with their grain essentially parallel

3.3.1.15
laminated bamboo curtain lumber
LBCL
lumber made of *bamboo curtain* (3.2.7) laminated parallel to grain

3.3.1.16
bamboo parallel sliver lumber
BPSL
lumber made from *bamboo sliver* (3.2.4) glued parallel to grain

3.3.2
bamboo veneer
sheet of bamboo obtained by rotary cutting a *bamboo culm* (3.1.2) section and/or by slicing/sawing *laminated bamboo* (3.3.1.14)

3.3.3
bamboo molding
shaped products made from *bamboo* (3.1.1)

3.3.4
bamboo flooring
assembled bamboo-based panel used as floor boards

3.3.4.1
bamboo floor board
product made of *bamboo* (3.1.1) as top layer and bamboo, wood or bamboo/wood-based panels as core, capable of being assembled to form a floor

3.3.4.2
laminated bamboo flooring
flooring product made from laminated *bamboo strips* (3.2.3)

3.3.4.3
bamboo scrimber flooring
flooring product made of *bamboo scrimber* (3.2.17)

3.3.4.4
indoor bamboo flooring
bamboo flooring (3.3.4) to be used indoors with limited resistance to water or high humidity

3.3.4.5
outdoor bamboo flooring
bamboo flooring (3.3.4) used outdoors with weather resistance

3.3.4.6
bamboo-wood composite flooring
flooring made of *bamboo* (3.1.1) as a surface layer and wood or wood-based panel as the core

3.3.4.7
decorated bamboo flooring
bamboo flooring (3.3.4) with decorated surface

3.3.4.8
flattened bamboo flooring
flooring with surface layer made of *flattened bamboo board* (3.2.18)

3.3.4.9
bamboo-wood composite container flooring
bamboo-wood composite made from wood veneer and *bamboo curtain* (3.2.7) by gluing, hot pressing, used for container flooring

3.3.5
bamboo fibre product
product made from *bamboo fibre* (3.2.14)

3.3.5.1
bamboo fibre textile
fabric made from *bamboo fibre* (3.2.14) spun, woven, dyed and finished