
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 *Arundinarieae* (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 day².

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

3.3.5.2**bamboo fibre-moulded product**

product made from *bamboo fibre* (3.2.14) being moulded

3.3.5.3**bamboo fibre foamed product**

composite product made from *bamboo fibre* (3.2.14) foamed with polyurethane or other foaming resin

3.3.6**bamboo charcoal and bamboo vinegar**

solid product and liquid by-product made of carbonized *bamboo* (3.1.1)

3.3.6.1**bamboo charcoal**

black, solid, porous product made of carbonized *bamboo* (3.1.1)

3.3.6.2**bamboo charcoal briquette**

shaped, solid product of carbonized *bamboo particles* (3.2.11) or charcoal made by compression or extrusion with or without binder

3.3.6.3**bamboo-based activated charcoal**

charcoal made from *bamboo* (3.1.1) being carbonized and activated

3.3.6.4**raw bamboo vinegar**

dark brown to amber liquid with acetic acid as the main component from smoky gas produced by dry distillation or carbonization of *bamboo* (3.1.1)

3.3.6.5**primary bamboo vinegar**

amber to orange yellow clear liquid processed from *raw bamboo vinegar* (3.3.6.4) being set still for a period of time with oil and suspended solids removed

3.3.6.6**refined bamboo vinegar**

light yellow to colourless transparent liquid made of *bamboo vinegar* (3.3.6.5) being distilled, the high boiling substances such as dissolved tar removed

3.3.7**bamboo extract products**

natural product extracted from bamboo or bamboo foliage leaf

3.3.7.1**bamboo extract**

natural product extracted from *bamboo* (3.1.1) by physical, chemical or biological methods

3.3.7.2**bamboo foliage leaf extract**

natural products extracted from *bamboo foliage leaf* (3.1.11)

3.3.7.3**natural bamboo sap**

natural leaching liquid from fresh *bamboo culm* (3.1.2) that has been heated, rich in a variety of human essential amino acids, flavonoids, vitamins and trace elements

3.3.8**bamboo commodity products**

traded, daily use products made from *bamboo* (3.1.1), i.e. chopstick, curtain blind, toothpick

3.3.9

bamboo furniture

value-added, movable objects made from *bamboo* ([3.1.1](#)) and bamboo-based panel intended to support various human activities such as seating, eating, sleeping, and storage

3.3.10

bamboo shoot product

cooked, fermented or dried fresh *bamboo shoot* ([3.1.12](#))

3.3.11

bamboo pellet

granular fuel made from *bamboo* ([3.1.1](#)) or its processing residue being crushed, dried, extruded

3.3.12

bamboo handicraft

handcrafted product made mainly from *bamboo* ([3.1.1](#))

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