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**Production life cycle assessment specification for wooden
flooring**

(English Translation)

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Foreword

This document is based on GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents" Drafting of the rules.

Appendices A and B of this document are informative appendices.

This document was proposed and managed by the National Wood-based Panel Standardization Technical Committee (SAC/TC 198).

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Technical Specification for Life Cycle Assessment of Wood Floor Production

1 Scope

This document specifies the terms and definitions of wood flooring life cycle assessment, product description, product life cycle assessment, additional environmental information, Comparability, supporting elements and verification of Type III Environmental Declaration (EPD) reports, etc.

This document is applicable to the production life cycle assessment of wood flooring.

2 Normative references

The contents of the following documents constitute indispensable clauses of this document through normative references in the text. Among them, dated reference documents, Only the dated version is applicable to this document; for undated references, the latest version (including all amendments) is applicable to this document file.

Note: For undated reference documents, if the latest version contains the referenced content, then the last version of the referenced content is included Version applies.

GB/T 24024-2001 Environmental Labeling and Declaration Type I Environmental Declaration Principles and Procedures
GB/T 24025-2009 Environmental Labeling and Declaration Type III Environmental Declaration Principles and Procedures
GB/T 24040-2008 Environmental Management Life Cycle Assessment Principles and Framework
GB/T 24044-2016 Environmental Management Life Cycle Assessment Requirements and Guidelines

3 Terms and definitions

GB/T 24024-2001, GB/T 24025-2009, GB/T 24040-2008 and GB/T 24044-2016 defined as well as the following terms and the definition applies to this document. For ease of use, GB/T 24024-2001, GB/T 24025, GB/T 24040 and GB/T are listed repeatedly below Certain terms and definitions in 24044.

Wooden flooring

Floors made of wood, bamboo or cork as the main raw material.

Product category

Groups of products with equivalent functions.

[Source. GB/T 24024-2001, 3.3] 3.3 Type III environmental declaration Provide an environmental statement based on quantitative environmental information data based on preset parameters, including additional environmental information when necessary.

Note 1: The preset parameters are based on GB/T 24040 series documents, including GB/T 24040 and GB/T 24044.

Note 2: Additional environmental information can be qualitative or quantitative.

[Source. GB/T 24025-2009, 3.2] 3.4 Product category rules (PCR) A set of specific rules, requirements and guidelines that must be met for one or more product categories to make a Type III environmental declaration.

[Source. GB/T 24025-2009, 3.5] 3.5 Life cycle A series of consecutive stages in the product system, from the acquisition of raw materials from nature or natural resources, to the final disposal.

[Source. GB/T 24040-2008, 3.1] 3.6 Production life cycle assessment (LCA) for wooden flooring Compilation and evaluation of inputs, outputs and their potential environmental impacts during the life cycle of wood flooring production systems.

Background data

Also called secondary data, it usually refers to database data, that is, data that does not need to be collected on-site.

Foreground data

Also called primary data, it usually refers to the actual data collected on site.

Life cycle inventory analysis (LCI) in life cycle assessment, the stage of compiling and quantifying the input and output of the entire life cycle of the evaluated product.

[Source. GB/T 24040-2008, 3.3] 3.10 Life cycle impact assessment (LCIA) in the life cycle assessment, the stage in which the potential environmental impact and importance of the product system in the entire life cycle are defined and evaluated.

[Source. GB/T 24040-2008, 3.4] 3.11 Functional unit Used as a benchmark unit to quantify the performance of the product system.

[Source. GB/T 24040-2008, 3.20] 3.12 System boundary A set of criteria is used to determine which unit processes are part of the product system.

[Source. GB/T 24044-2016, 3.32] 3.13 Cut-off criteria Whether the amount of material and energy flow or the degree of importance of environmental impact related to the unit process or product system is excluded from the research scope Regulations made outside the confines.

[Source. GB/T 24040-2008, 3.18] 3.14 Characterization factor it is derived from the

characteristic model and used to convert the analysis result of the life cycle inventory into a factor that is a common unit of type parameters.

[Source. GB/T 24044-2016, 3.37] 3.15 Impact category the classification of environmental issues concerned can be classified into the results of life cycle inventory analysis.

[Source. GB/T 24044-2016, 3.39]

4 Product description

The product description should enable the user to clearly identify the product, such as product name, specification, purpose, main performance and technical parameters, and its He signs waiting. Wood flooring products can be described with reference to the requirements of relevant national documents.

5.1 Purpose

Evaluate the environmental impact of the wood floor production life cycle, and provide requirements for the index parameters of the Type III Environmental Declaration (EPD).

5.2.1 Functional unit

Production of 1m³ wooden floor.

5.2.2 System boundary

The boundary of the wood floor life cycle system, as shown in Figure 1, includes.

- Raw material production (preparation of raw materials and substrates);
- Auxiliary raw material production (paints, adhesives, curing agents, waterproofing agents, antifungal agents, flame retardants, insect repellents, etc.);
- Energy production (electricity, raw coal, gasoline, natural gas, etc.);
- Transportation of raw materials and energy;
- Wood floor production (see appendix B), excluding the use and abandonment phases.

Figure 1 Schematic diagram of the boundary of the wood floor life cycle system

5.2.3.1 Enterprise site data

The company's on-site data includes raw material consumption, energy consumption, pollutant emissions, and transportation (mainly transportation (See Appendix A, Table A.1) and other inventory data (see Appendix A, Table A.1), and the method and source of data acquisition should be explained.