

Eco Mark Product Category No.123 “Building Products (Materials for Interior Work) Version2.16” Certification Criteria

**A. Materials for wood work
Category A-1 Wooden Floor**

Japan Environment Association
Eco Mark Office

1. Purpose of Establishing Criteria

Omitted

2. Applicable Scope

- Single-layer and multi-layer wooden floors as defined in Japan Agricultural Standard JAS
- Sound insulation wooden floor

3. Terminology

Omitted

4. Certification Criteria and Certification Procedure

To show conformance to the individual criteria, the Applicant shall submit the respective Attached Certificate forms duly filled in.

In the event re-examination under the present Certification Criteria is sought for a product that is already certified in the Product Category No. 115 “Products Using Thinned-out Wood, Reused Wood, etc. Version 2,” the raw materials certification issued by the raw material supplier which is one of the procedures to show conformance to the applicable criteria 4-1. (1) as well as the certifications procedures (7) and (7) may be substituted by filling in necessary items on the Attached Certificate form and declaring further therein that no alterations have been made to the product already certified.

4-1. Environmental Criteria and Certification Procedure

- (1) The wooden part of the Product shall be 100% reused/unused wood or waste plant fiber. Small-diameter logs of less useful wood shall satisfy the requirements on forest certification defined in Table 1 if corresponding to “a” or “b” in Terminology. In the event the Product uses as its raw material construction-derived wood that is defined as disassembled architectural wood (wood and woody materials that are generated as waste as a result of building demolition), materials that have

received preservative, termite control or insect repellent treatment shall have been sorted out and removed. The content of hazardous substances in the Product shall satisfy the requirements with respect to hexavalent chromium and arsenic that are listed in Attached Table 5 of the enforcement regulation of the Soil Contamination Countermeasures Law (Ministerial Ordinance of the Ministry of the Environment No. 29 dated December 26, 2002).

Table 1 Forest Accreditation Requirements

Accreditation standards	That the standard balances the economic, ecological and social interests, adheres to the principles of Agenda 21 and the Declaration of Forest Principle, and observes compliance with pertinent international agreements and treaties.
	That the standard contains secure requirements and is conducive to and oriented toward sustainable forests.
	That the standard is recognized nationally or internationally and is recommended as part of a process open to participation of ecological, economic and social stakeholders.
Accreditation system	That the accreditation system is transparent, maintains extensive credibility nationally or internationally, and is capable of verifying the requirements.
Accreditation organization or body	That the organization is fair and reliable. That it is capable of verifying performance of the requirements, communicating the findings and enforcing effective performance of the requirements.

[Certification Procedure]

A certificate on the types of reused/ unused wood and waste plant fiber used in the product and those content rates shall be submitted. In addition, a raw material certificate issued by the raw material supplier shall also be submitted. If there are multiple vendors, a list of the vendors and list of certification of the top 10 vendors in terms of volume of material traded shall be submitted.

If using thinned wood as the material, a certificate of origin that includes information on the place of production, type of tree, and year of planting shall be submitted with photographs of the forest concerned (showing clearly that the forest stand has been thinned). The trimming percentage and how many times the forest has been thinned, including the most recent trimming shall also be indicated if possible.

If using less useful wood, a certificate including the following information shall be submitted. If small diameter logs, which fall into a. or b. of Terminology are used as the material,, official documents stating that the forest has been certified as sustainable by a third party shall be submitted.

- Type of forest (natural, artificial, etc.), location, tree species, and in case of artificial forest, the year of forestation
- The reason for lumbering (damage by diseases, insects, animals or natural calamities, being not straight, being a small-diameter wood, etc.) and in case of small-diameter wood the method of management, end diameter, and other information

If using bamboo as the raw material in less useful wood, certificates indicating the following information and photographs/maps of the surroundings of the bamboo grove shall be submitted.

* Type of bamboo, place of production, surrounding conditions, and description that logging is carried out for the purpose of appropriate maintenance and management in environment preservation, as well as management plans and quantity.

If using lumber from dismantled buildings, a certificate (operation manuals, operational flow-chart, etc.) that proves sorting of lumber from dismantled buildings and removing of lumber subject to preservatives, termicides, and pesticides shall be submitted. In addition, the test results prepared by the third party test organization or public body shall be submitted.

- (2) If wood is used in base material, thinned wood as the material shall be harvested in legally appropriate procedure consistent with the forest laws of timber producing countries or regions.

[Certification Procedure]

A certificate shall be submitted to prove that the timber whose legality has been verified* in accordance with “Guideline for Verification on Legality and Sustainability of Wood and Wood Products” of Forestry Agency has been in custody to be separated by the applicant or the paper manufacturer and is supplied to the applied products. At the same time, the applicant or the paper manufacturer who issues the above certificate shall submit any of the following certificates:

- 1) Certificate that the applicant or the paper manufacturer has been assessed and authenticated by the CoC (Chain of Custody) Certification System;
- 2) Certificate of the authorized company (that guarantees the association member’s adequate way of supplying wood and wood products verified with legality, etc.); and
- 3) Code of management practice which stipulates the way of custody to manage wood and wood products verified with legality (the method in the case that the timber verified with legality only is handled. The same applies to hereunder), retention of certificates for a predetermined period, etc.

In the event that Item 2) or 3) above is chosen and the certificate is submitted, the applicant or the material supplier who issues the above-mentioned certificates shall publicly announce through its Web site the code of management practice prescribed by the association concerned in the case of Item 2) and shall prescribe and publicly announce through its Web site the code of management practice concerning the scheme to assess and guarantee the system for separative management, document management for retention of certificates for a predetermined period, etc. in the case of Item 3).

*Confirm the certificate issued by the related company closest in commercial process, which at least verifies that wood and wood products they supply are with legality and under separative custody management.

- (3) The total mass of any non-woody materials that may be added shall less than 30% of the total mass of the Product. If any adhesives, additives, or any decorative laminates are used in the Product, their respective recipe formulations and the mass content shall be stated.

[Certification Procedure]

The Applicant shall state in the Attached Certificate form the conformance (or lack thereof) to this criteria.

- (4) The Product shall be free of termite control agents, preservatives, or insect repellents.

[Certification Procedure]

The Applicant shall state in the Attached Certificate form the conformance (or lack thereof) to this criteria.

- (5) The product using paint shall not contain any heavy metals or their compounds listed in Table 2 as prescribed constituents of the paint.

Table 2 Standards for heavy metals and their compounds

Substance
Cadmium
Mercury
Hexavalent chromium
Lead
Arsenic
Antimony
Tributyl tin
Triphenyl tin

[Certification Procedure]

The Applicant shall submit the certificate issued by the paint manufacturer to show that the product does not contain any applicable substances. In the event Eco Mark-certified paints are used, proof of conformance may be substituted by mention of the “brand name” and “certification number” of the certified paint to the application form.

- (6) Products for which wooden materials (engineering wood), adhesives and paints have been used shall satisfy “Standard of emission rate of volatile organic compounds from building products (Committee for standardization of emission rate of VOC from building products)” regarding emission of Toluene, Xylene, Ethylbenzene or Styrene at the time of product shipment. (Table 3)

Table 3 Standard value of VOC emission rate

Target VOC	Standard value of emission rate (μ g/m ² h)
Toluene	38
Xylene,	120
Ethylbenzene	550
Styrene	32

[Certification Procedure]

Regarding emission of Toluene, Xylene, Ethylbenzene or Styrene, test results followed by JIS A 1901 “Measuring methods for emission of volatile organic chemicals (VOC), formaldehyde and other carbonyl compounds—small chamber method” conducted by a third party testing body or an own company, or indication details of “conformance to 4VOC standard” defined in “Housing part VOC indication guidelines” shall be submitted. In addition, for products for which the target VOC are not added as prescribed components, the test may be exempted if a certificate issued by the manufacturer which proves the said substances have not been added in the product is submitted.

- (7) In the case of Products for which adhesives or paints have been used, either the Product or the individual woody materials used, the adhesives, and the paints shall, with respect to the question of formaldehyde emission, conform to the applicable JIS standard, are rated “F four-stars” under the JAS standards, and are outside the scope of regulations set forth by the Minister of Land, Infrastructure

and Transport, respectively. Put differently, the Product shall satisfy the numerical criteria of either a) or b) below:

- a) The formaldehyde emission is not more than 0.3 mg/l on average and not more than 0.4 mg/l at maximum, as measured pursuant to JIS A 1460 “Test method for formaldehyde emission of building boards—desiccator method.”
- b) The formaldehyde emission rate is no higher than $5\mu\text{g}/(\text{m}^2\cdot\text{h})$, as measured pursuant to JIS A 1901 “Test method for formaldehyde emission of building materials—small chamber method.”

Provided however the following alternatives c) and d) are also accepted:

- c) The formaldehyde emission is not more than 0.3 mg/l on average and not more than 0.4 mg/l at maximum, as measured pursuant to the glass desiccator method or the acrylic desiccator method that is stipulated in the individual JAS standards corresponding to woody material-based wooden floor.
- d) In the case of adhesives or paints for which JIS or JAS standards exist, the formaldehyde emission rate, as calculated by the use of conversion formula from the results of glass desiccator method measurement set out in the applicable individual standard, is no higher than $5\mu\text{g}/(\text{m}^2\cdot\text{h})$.

[Certification Procedure]

The Applicant shall state in the Attached Certificate form the conformance (or lack thereof) to this criteria.

In the event the Product used none of the formaldehyde emitting building materials specified by the Building Standards Law and hence is not subjected to formaldehyde regulations, the Applicant shall so state in the Attached Certificate form.

With respect to the Products for which any of the formaldehyde emitting building materials specified by the Building Standards Law are used, the Applicant shall submit a certificate showing that the Product has been rated Class “F four-stars” based on test results according to JIS standard or a document explaining that the product is outside the scope of regulations by the Minister of Land, Infrastructure and Transport.

- (8) The Product shall be accompanied by a manual relating to installation, use, maintenance, disassembly, disposal and recycling that is available for reading by the builder and the building owner.

[Certification Procedure]

The Applicant shall state in the Attached Certificate form the conformance (or lack thereof) to this criteria. In addition, the Applicant shall submit a sample of a

manual relating to installation, use, maintenance, disassembly, disposal and recycling. Regarding a part of the product's lifecycle from installation to recycling which is not included in the manual, the reason shall be indicated.

- (9) The Product shall be again recyclable after use. With respect to composite materials, attention shall have been paid for easy separation of different materials (base material, resin-based coating, etc.); provided however this criteria does not apply to any materials that are laminated onto the reverse side for the purposes of moisture prevention and unevenness moderation.

[Certification Procedure]

The Applicant shall explain how main materials are recycled and how different materials are separated.

- (10) The product shall have no flame retardant of Polybrominated biphenyl (PBB), Polybrominated diphenylether (PBDE) or short-chain chlorinated paraffin (the number of chained C is 10 to 13 and contained chloride concentration is 50% or over) added as prescriptive constituents.

The product shall not use antimicrobial agents (including fungicides) as far as possible. In the case of use, the product shall be certified by such as the SIAA Mark of Society of Industrial technology for Antimicrobial Articles or Registration system for the use of antimicrobial performance criteria of Japan Construction Material & Housing Equipment Industries Federation.

[Certification Procedure]

Compliance (or lack thereof) with this item shall be indicated in the Attached Certificate.

In the case of using flame retardant, the Applicant shall fill in the names of chemical substances on the Attached Certificate. In the case of using antimicrobial agents, a copy of a certificate etc shall be submitted.

- (11) In manufacturing the applied product, related environmental laws and regulations and pollution control agreement (hereinafter referred to as the "Environmental Laws, etc.") must be followed with respect to air pollution, water contamination, noise, offensive odor, and emission of hazardous materials in the area where the plant performing the final manufacturing process is located.

In addition, the state of compliance with the Environmental Laws, etc. for the last five years from the date of application (whether there is any violation) must be reported. If there is any violation, it is necessary that proper remedies and preventive measures have been already taken, and the related Environmental Laws, etc. must thereafter be followed appropriately.

[Certification Procedure]

With respect to the compliance with the Environmental Laws, etc. in the area where the plant performing the final manufacturing process is located, a certificate issued by the representative of the business of manufacturing the applied product or the manager of the relevant plant (entry or attachment of the list of names of the Environmental Laws, etc.) must be submitted.

In addition, it is necessary to report whether there is any violation during the last five years, including a violation subject to administrative punishment or administrative guidance, and if there is, the following documents in a and b must be submitted:

- a. With respect to the fact of violation, guidance documents from administrative agencies (including order of correction and warning) and copies of written answers (including those reporting causes and results of correction) to such documents (making a series of progress clear);
- b. Following materials (copies of recording documents, and so on) concerning the management system for compliance with the Environmental Laws, etc. in 1)-5):
 - 1) List of the Environmental Laws, etc. related to the area where the plant is located;
 - 2) Implementation system (organizational chart with entry of roles, etc.);
 - 3) Document stipulating retention of recording documents;
 - 4) Recurrence prevention measures (future preventive measures);
 - 5) State of implementation based on recurrence prevention measures (result of checking of the state of compliance, including the result of onsite inspection).

4-2. Quality Criteria and Certification Procedure

- (12) The Product quality shall conform to the JAS “Japan Agricultural Standard for Wooden Floor.”

In the case of sound insulation wooden floor, the sound insulation performance shall not exceed Level “L-50” stipulated in JIS A 1419, as adjudged from test results according to JIS A 1440. With respect to bamboo wooden floor, conformance to in-house standards similar to corresponding JAS “Japan Agricultural Standard for Wooden Floor” shall suffice.

[Certification Procedure]

The Applicant shall submit a document certifying the test results and other data to show conformance to the applicable JAS standards and JIS standards. In the event the Product or the manufacturing site of the Product has been certified by JAS and JIS, submission of a copy of certificate issued by JAS, JIS or the like

shall suffice for the aforesaid purpose. With respect to the Products corresponding to JAS, a certification showing conformance to in-house standards similar to corresponding JAS “Japan Agricultural Standard for Wooden Floor” shall be submitted.

5. Product Classification, Indication and Others

Omitted.

May 1, 2007	Established (scheduled) (Version 2.0)
November 1, 2007	Revised (4-1.(4)(5)(8): Version 2.2)
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December 31, 2027	Expiration date

The Certification Criteria for the Product Category will be revised when necessary.