

Eco Mark Product Category No.123

“Building Products (Materials for Interior Work)

Version2.0”

Certification Criteria (Draft)

— Applicable Scope —

- A. Materials for wood work
- B. Materials for joiner’s work
- C. Materials for carpentry
- D. Materials for curtain and related works (scheduled)
- E. Materials for unit and other works (scheduled)

Established: May 5, 2007 (scheduled)

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Term of validity: December 31, 2012

Japan Environment Association

Eco Mark Office

NOTE: This document is a translation of the criteria written in Japanese. In the event of dispute, the original document should be taken as authoritative.

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A-1. Wooden floor

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B-3. Window sash, door set

C. Materials for carpentry

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C-3. Wall paper

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C-5. Sound absorbing materials

C-6. Board for interior finish

D. Materials for curtain and related works (scheduled)

E. Materials for unit and other works (scheduled)

Category B-3 “Window Sash/Door-set”

1 . Applicable Scope

*Sealed insulating glass	JIS R 3209
*Window sash	JIS A 4706
*Rigid PVC-based window sash	JIS A 4714
*Components of sectional overhead door	JIS A 4715
*Door-set	JIS A 4702

2 . 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. 123 “Building Products Using Recycled Material,” and the Product Category No. 124 “Glass Products Version 1”, the Recycle Material Certificate issued by the supplier of the recycled material which is one of the procedures to show conformance to the applicable criteria 4-2. (9) 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.

2-1. Environmental Criteria and Certification Procedure

- (1) The window sash shall be of a double- or triple-layer structure of multiple glass sheets.

The door shall be made of heat insulation materials or otherwise have features for effective heat insulation.

[Certification Procedure]

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

- (2) The overall heat transmission coefficient (“U”) of the window sash or the door, as stipulated in the Design and Construction Guidelines for Rationalization of Energy Use in Dwellings (Notice No.1291 of the Ministry of Land, Infrastructure and Transport, as partly amended, of 2001), shall be no higher than $2.33 \text{ W}/(\text{m}^2 \cdot \text{K})$, or the overall heat transmission resistance value (“1/U”) no less than $0.43 \text{ m}^2 \cdot \text{K}/\text{W}$.

[Certification Procedure]

The Applicant shall specify the overall heat transmission coefficient or the resistance value in the Attached Certificate.

- (3) The sealed insulation glass, window sash and door-set shall conform to the standards of Class A-4 air tightness pursuant to JIS A4706 or JIS A4702.

[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 test report.

- (4) The sunshine entry rate of the glass used in the window sash, as stipulated in the Design and Construction Guidelines for Rationalization of Energy Use in Dwellings (Notice No.1291 of the Ministry of Land, Infrastructure and Transport, as partly amended, of 2001), shall be no higher than 0.66.

[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 test report.

- (5) Products for which adhesives or paints have been used shall have no emission of toluene or xylene detected at the time of product shipment. “No emissions detected” shall mean no more than the lower quantification limit based on Japan Industrial Standard JIS A 1901 “Measuring methods for emission of volatile organic chemicals (VOC), formaldehyde and other carbonyl compounds—small chamber method.”

[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 test report. In the event neither toluene nor xylene is added to the Product, adhesives or paints as formulation component, the aforesaid test may be exempted and the Applicant shall submit a document substantiating no addition of the said

substances.

- (6) Applicable environmental laws and regulations, pollution prevention agreements and any other requirements shall have been observed in the course of the Product manufacture with respect to air pollution, water contamination, noise, vibration, obnoxious odor, emission of hazardous substances, etc.

[Certification Procedure]

The Applicant shall submit a statement signed by the general manager of the manufacturing site of the Product declaring that all applicable environmental laws and regulations and the like have been observed and no violations or the like have been committed during the five-year period preceding the date of application.

- (7) The Product shall be again recyclable after use. Alternatively, the discarding and disposal of the Product shall be as easy as those of ordinary products. With respect to composite materials, attention shall have been paid for easy separation of different materials. With respect to glass, interlayer films and laminated films shall be separable.

[Certification Procedure]

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

- (8) Rigid PVC-based sash for interior window shall be so labeled for the purpose of easy recycling. For polymer classification, the marks stipulated in Japan Industrial Standards JIS K6899-1 or ISO 1043-1, and the method of labeling shall conform to JIS K6999. Products for which material identity labeling is required by other laws and regulations may be exempted of this criteria to the extent they conform to such other laws and regulations.

[Certification Procedure]

Photographs and/or drawings that allow verification of the labeling and label location shall be submitted.

2-2. Quality Criteria and Certification Procedure

- (9) The quality of the Product shall conform to any applicable JIS standards.

[Certification Procedure]

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

Category C-4 “Insulation Materials”

1. Applicable Scope

- *Man made mineral fiber thermal insulation materials JIS A 9504
- *Preformed cellular plastics thermal insulation materials JIS A 9511, and equivalent thermal insulation materials
- *Man made mineral wool thermal insulation materials for dwellings JIS A 9521
- *Sprayed-applied fiber thermal insulation materials JIS A 9523
- *Spray-applied rigid polyurethane foam for thermal insulation JIS A 9526
- *Organics/inorganics mixture thermal insulation materials and inorganic thermal insulation materials

2. 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. 123 “Building Products Using Recycled Material”, 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 procedure 4-2. (10) 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.

2-1. Environmental Criteria and Certification Procedure

- (1) With respect to man made mineral fiber thermal insulation materials, man made mineral wool thermal insulation materials for dwellings, and spray-applied mineral fiber thermal insulation materials, recycled materials shall be used as raw material. The content of recycled materials shall conform to the standards stipulated in Table 1. In addition, the thermal conductivity shall conform to the standards stipulated in Table 1.

Table 1 Content of recycled material and thermal conductivity

Type of material	Recycled material content	Calculation formula	Thermal conductivity W/(m·K)
Glass wool	80 wt% min.	(Total weight of recycled materials)/ (Weight of base material)	0.045 max.
Rock wool	85 wt% min.	(Total weight of recycled materials)/ (Weight of base material)	0.045 max.
Cellulose fiber	100 wt%	(Total weight of recycled materials)/ (Weight of base material) moisture coefficient 15% max., excluding added materials	0.040 max.
Others	50 wt% min.	(Total weight of recycled materials)/ (Weight of base material)	0.047 max.

[Certification Procedure]

The applicant shall state in the attached certificate the identity and content of the compounded recycled materials as well as their thermal conductivity, and shall submit the same together with certificates of raw material supply issued by the respective suppliers.

(2) Preformed cellular plastics thermal insulation materials and spray-applied rigid polyurethane foam for thermal insulation shall conform to either of the following standards (a) or (b):

(a) The below-mentioned standards for the content of recycled materials (a-1) as well as for the thermal conductivity (a-2) shall be met.

a-1. Recycled material(s) is (are) used and its (their) content is no less than 50%.

a-2. The thermal conductivity is no higher than 0.040 W/(m·k).

[Certification Procedure]

For (a-1), the applicant shall state in the Attached Certificate the identity and content of the compounded recycled materials, and shall submit the same together with certificates of raw material supply issued by the respective suppliers.

For (a-2), the applicant shall state the conformance to this criterion in the Attached Certificate and submit test results.

- (b) The thermal conductivity shall meet the standards in Table 2.

Table 2 Thermal conductivity of preformed cellular plastics thermal insulation materials

Type of of thermal insulation material	Thermal conductivity
Polystyrene foam (beads process)	0.034W/(m·k) min.
Polystyrene foam (extrusion process)	0.028W/(m·k) min.
Rigid polyurethane foam	0.028W/(m·k) min.
Super-high expansion ratio polyethylene foam	0.038W/(m·k) min.
Phenol foam	0.028W/(m·k) min.

[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 test report.

- (3) No foamed resins used in the Product shall have been made by the use of any of the five specified CFCs listed in the Attached Table 1, other CFCs, carbon tetrachloride, trichloroethane, or CFC substitutes (HCFC, HFC).

[Certification Procedure]

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

- (4) Products for which adhesives or paints have been used shall have no emission of toluene or xylene detected at the time of product shipment. “No emissions detected” shall mean no more than the lower quantification limit based on Japan Industrial Standard JIS A 1901 “Measuring methods for emission of volatile organic chemicals (VOC), formaldehyde and other carbonyl compounds—small chamber method.”

[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 test report. In the event neither toluene nor xylene is added to the Product, adhesives or paints as formulation component, the aforesaid test may be exempted and the Applicant shall submit a document substantiating no addition of the said substances.

- (5) With respect to such man made mineral fiber thermal insulation materials, man made mineral wool thermal insulation materials for dwellings, and spray-applied fiber thermal insulation materials that use glass wool or rock wool as well as such preformed cellular plastics thermal insulation materials that use phenol foam, the requirements for rating as F**** in terms of formaldehyde release pursuant to JIS A9504, JIS A9511, JIS A 9521 and JIS A 9523 shall be met.

[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 test report.

- (6) Applicable environmental laws and regulations, pollution prevention agreements and any other requirements shall have been observed in the course of the Product manufacture with respect to air pollution, water contamination, noise, vibration, obnoxious odor, emission of hazardous substances, etc.

[Certification Procedure]

The Applicant shall submit a statement signed by the general manager of the manufacturing site of the Product declaring that all applicable environmental laws and regulations and the like have been observed and no violations or the like have been committed during the five-year period preceding the date of application.

- (7) 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.

- (8) The Product shall be again recyclable after use. Alternatively, the discarding and disposal of the Product shall be as easy as those of ordinary products. With respect to composite materials, attention shall have been paid for easy separation of different materials.

[Certification Procedure]

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

2-2. Quality Criteria and Certification Procedure

- (9) The quality of the Product shall conform to any applicable JIS standards.

With respect to thermal insulation materials equivalent to preformed cellular plastics thermal insulation materials, conformance to in-house standards equivalent to JIS A 9511 shall suffice. With respect to organics/inorganics mixture thermal insulation materials and inorganic thermal insulation materials, conformance to in-house standards similar to corresponding JIS standards shall suffice.

[Certification Procedure]

The applicant shall submit a certificate of test results and other data showing conformance to the applicable JIS standards. If the applied product or the manufacturing plant of the applied product is JIS certified, submission of a photocopy of such JIS certification shall be sufficient for certification of conformance to the present criteria. With respect to JIS-equivalent products, a certificate showing conformance to the in-house standards equivalent to JIS A 9511 shall be submitted. With respect to organics/inorganics mixture thermal insulation materials and inorganic thermal insulation materials, a certificate showing conformance to the in-house standards similar to JIS A 9511 and others shall be submitted.

Category C-5 “Sound Absorbing Materials”

1. Applicable Scope

*Sound absorbing materials JIS A 6301

2. 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. 123 “Building Products Using Recycled Material”, 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. (X), as well as the certifications procedure (X), (3) and 4-2. (X) 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.

2-1. Environmental Criteria and Certification Procedure

- (1) The sound absorbing materials shall conform to classification 0.9 in terms of degree of sound absorption pursuant to JIS A6301.

[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 test report.

- (2) Sound absorbing materials that use woody materials, glass wool and/or rock wool shall use recycled materials. Glass wool shall have a glass cullet utilization ratio of no less than 80%, rock wool shall have a blast furnace slag content of no less than 85% to the rock wool weight, and woody material shall have a reused or unused woody material content of 100% to the woody material weight.

[Certification Procedure]

The Applicant shall fill in the names of recycled materials and their respective contents on the Attached Certificate form and submit it together with the raw materials certifications issued by the respective raw material suppliers. With respect to reused or unused woody materials, the certificate stipulated in Attachment 1 shall be submitted.

- (3) No foamed resins used in the Product shall have been made by the use of any of the five specified CFCs listed in the attached Table 1, other CFCs, carbon tetrachloride, trichloroethane, or CFC substitutes (HCFC, HFC).

[Certification Procedure]

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

- (4) Products for which adhesives or paints have been used shall have no emission of toluene or xylene detected at the time of product shipment. “No emissions detected” shall mean no more than the lower quantification limit based on Japan Industrial Standard JIS A 1901 “Measuring methods for emission of volatile organic chemicals (VOC), formaldehyde and other carbonyl compounds—small chamber method.”

[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 test report. In the event neither toluene nor xylene is added to the Product, adhesives or paints as formulation component, the aforesaid test may be exempted and the Applicant shall submit a document substantiating no addition of the said substances.

- (5) With respect to sound absorbing materials that use glass wool, rock wool and phenol foam, the requirements for rating as F**** in terms of formaldehyde release pursuant to JIS A9504, JIS A9511, JIS A 9521 and JIS A 9523 shall be met.

[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 test report.

- (6) Applicable environmental laws and regulations, pollution prevention agreements and any other requirements shall have been observed in the course of the Product manufacture with respect to air pollution, water contamination, noise, vibration, obnoxious odor, emission of hazardous substances, etc.

[Certification Procedure]

The Applicant shall submit a statement signed by the general manager of the

manufacturing site of the Product declaring that all applicable environmental laws and regulations and the like have been observed and no violations or the like have been committed during the five-year period preceding the date of application.

- (7) 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.

- (8) The Product shall be again recyclable after use. Alternatively, the discarding and disposal of the Product shall be as easy as those of ordinary products. With respect to composite materials, attention shall have been paid for easy separation of different materials.

[Certification Procedure]

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

2-2. Quality Criteria and Certification Procedure

- (9) The quality of the Product shall conform to any applicable JIS standards.

[Certification Procedure]

The applicant shall submit a certificate of test results and other data showing conformance to the applicable JIS standards. If the applied product or the manufacturing plant of the applied product is JIS certified, submission of a photocopy of such JIS certification shall be sufficient for certification of conformance to the present criteria.

Category C-6 “Board for Interior Finish”

1. Applicable Scope

*Board for interior finish

2. 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. 123 “Building Products Using Recycled Material”, 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 procedure (3), (4) and 4-2. (8) 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 (For fluorine and boron indicated in 4-1.(3), the test shall be performed as shown in applicable items of the criteria).

2-1. Environmental Criteria and Certification Procedure

- (1) The product shall contain recycled materials listed in Table 1 in total in no less than 50% of the total weight of the product.

Table 1 Type of recycled materials

Recycled material	
Plastics	Paper
Rubber	Coal ash
Wood	Glass
Blast furnace slag	Gypsum (including desulphurization gypsum)
Steel slag	Melting furnace slag

[Certification Procedure]

The Applicant shall fill in the names of recycled materials and their respective contents on the Attached Certificate form and submit it together with the raw materials certifications issued by the respective raw material suppliers. With respect to wood, the certificate stipulated in Attachment 1 shall be submitted.

- (2) Products in which wood is used shall contain no ant repellents, preservatives, fungicides or insecticides.

[Certification Procedure]

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

- (3) Regarding the elution of hazardous substances including heavy metals, the product shall conform to the standards for specified hazardous substances listed in Schedule 2 of the implementation regulations of Soil Contamination Countermeasures Law (Ministerial Order 29 of the Ministry of the Environment, 2002) with respect to cadmium, lead, hexavalent chromium, arsenic, mercury, selenium, fluorine and boron.

With respect to cadmium, lead, arsenic and mercury, however, no dissolution test shall be required to the extent that the test pursuant to 4-1.(4) has shown “below detectable limit.”

[Certification Procedure]

The applicant shall state in the Attached Certificate conformance to this certification criterion, and submit the test results prepared by an independent test organization or public body.

- (4) Regarding the content of hazardous substances, the product shall conform to the standards for specified hazardous substances listed in Schedule 3 of the implementation regulations of Soil Contamination Countermeasures Law (Ministerial Order 29 of the Ministry of the Environment, 2002) with respect to cadmium, lead, arsenic and mercury.

[Certification Procedure]

The applicant shall state in the Attached Certificate conformance to this certification criterion, and submit the test results prepared by an independent test organization or public body.

- (5) The Product shall not contain asbestos.

The Product that is made of gypsum board recycled from the waste generated in connection with building demolition shall be made free of products that are known to have contained asbestos, arsenic, or cadmium through the process of sorting and removal. On the subject of specific

waste gypsum boards to be eliminated, the Applicant should refer to “On the Inclusion of Asbestos in Gypsum Boards” published by the Gypsum Board Industry Association, “Proper Handling of Hazardous Substances and the Like Associated with Building Demolition and the Like” published by the Construction By-products Recycling Promotion Conference, and other pertinent documents.

No analysis shall be required if the Product is made of gypsum board that is recycled from the waste coming out of the manufacturing process of gypsum board processing plants or generated at a new building construction site, because the recycled material does not contain asbestos.

[Certification Procedure]

The Applicant shall state in the Attached Certificate form the conformance (or lack thereof) to this criteria or shall show conformance by way of testing. When showing conformance by way of testing, the Applicant shall submit a document certifying the results of tests conducted by an independent testing organization or by a public body. The asbestos content shall be measured in accordance with JIS A 1481 “Measuring Method for Asbestos Content in Building Materials.” Judgment as to the presence of asbestos shall be made pursuant to the Instruction Letter No.0821002 of the Labour Standards Bureau of the Ministry of Health, Labour and Welfare dated August 21, 2006 titled “On the Analysis Method of Asbestos Content in Building Materials” and the Instruction Letter No.0821001 of the said Bureau dated the same day titled “On the Points to Be Noted in Relation to the Analysis Method of Asbestos Content in Building Materials.”

- (6) Applicable environmental laws and regulations, pollution prevention agreements and any other requirements shall have been observed in the course of the Product manufacture with respect to air pollution, water contamination, noise, vibration, obnoxious odor, emission of hazardous substances, etc.

[Certification Procedure]

The Applicant shall submit a statement signed by the general manager of the manufacturing site of the Product declaring that all applicable environmental laws and regulations and the like have been observed and no violations or the like have been committed during the five-year period preceding the date of application.

- (7) 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.

2-2. Quality Criteria and Certification Procedure

- (8) The quality of the Product shall conform to any applicable JIS standards. For the processed product, conformance to the applicable ISO, JIS, and/or industrial standards shall suffice. In case there is no applicable JIS standard, etc. for a product, the product shall conform to in-house standards similar to JIS.

[Certification Procedure]

The Applicant shall submit a document certifying the test results and other data to show conformance with the applicable JIS standards. In the event the Product or the manufacturing site of the Product has been certified by JIS, submission of a copy of certificate issued by JIS shall suffice for the aforesaid purpose. In case there is no applicable JIS standard, etc. for a product, a certificate showing conformance to the in-house standards similar to JIS A 6301 and others shall be submitted.

Established (scheduled) (Version September 1, 2007
2.0):

Validity Period: December 31, 2012

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