

EL723. Recycled Wood Products

[EL723-1994/6/2009-72]



1. Scope

The criteria shall apply to the wood material made by using waste wood timbers (particleboard, fiberboard and edge glued panel etc.) and the processed products. However, the products specified with separate certification criteria shall be excluded.

2. Definitions

2.1

“Wood waste” refers to the wood waste as stipulated in “Wood waste classification and recycling standard” in accordance with the enforcement regulations of the Waste Management Law.

2.2

“Fibrous wastes of herbaceous plants” is the cellulose raw material obtained from herbaceous plants, such as the byproduct of the green land (reed, silver grass, etc.), or product production and processing (chaff, residuals of bamboo, etc.).

2.3

“Wood materials” refer to the materials formed with waste timbers such as particleboards, fiber boards and edge glued panels.

2.4

“Particleboards” refer to the boards made of wood fragments, such as chips or shavings, which are formed and pressed into sheet form and bonded together with resin.

2.5

“Fiber boards” refer to the boards composed of plants fibers, such as timbers or chaffs. According to the density, they are categorized into insulation boards (IB), medium density fiber boards (MDF) and hardboards (HB).

2.6

“Edge glued panels” refer to the glued processed timbers, such as small lumbered wood or wood layers, that are formed and pressed into sheet form in the direction of fiber, paralleled each other and bonded with resin.

2.7

Volatile organic compounds emissions (VOCs emissions)” refers to the quantity of the VOC (Volatile Organic Compounds) per unit hour that is discharged to the outside while the product is running under the defined conditions.

Note: This standard tentatively defines them as VOCs from n-hexane to n-hexadecane on the chromatogram, which is created by the gas chromatograph equipped with the mass spectrometer

3. Certification Criteria

3.1 Environmental Criteria

3.1.1

With respect to the consumption of resource in the manufacturing process, the product shall satisfy the following criteria.

3.1.1.1

Wood raw material composed of product shall be used by more than 70 weight%.

3.1.1.2

Waste wood shall be used by 100% as wood raw material.

3.1.2

With respect to the release of pollutants, the product shall satisfy the following criteria.

3.1.2.1

The formaldehyde emission after 7 days in indoor product shall be less than 0.12 mg/m²·h.

Note) It will be applied only for the case that the use of product is definitely for indoor or is specified as ‘for indoor’.

3.1.2.2

The VOCs emission after 7 days in indoor product shall be less than 0.4 mg/m²·h and the toluene emission shall be than 0.080 mg/m²·h.

Note) It will be applied only for the case that the use of product is definitely for indoor or is specified as 'for indoor'.

3.2 Quality Criteria

3.2.1

Density, moisture content and bending intensity of particleboard and fiberboard shall satisfy respectively the quality criteria of KS F 3104 (particleboard) and KS F 3200 (fiberboard) by type.

3.2.2

There shall not be notable defect on the surface of edge glued panel, and adhesive power and moisture content shall satisfy the relevant quality criteria of KS F 3118 (edge glued material for garnering), KS F 3021 (edge glued material for structure), KS F 3022 (wood edge glued board) by type of edge glued panel

3.2.3

If Korean Industrial Standards are available as a national standard of the product in question, it should satisfy the quality or performance criteria of the standard in question. However, items related to "3.1 Environmental Criteria" are excluded

3.2.4

If no Korean Industrial Standards are available as a national standard of the product in question, it should satisfy the quality and performance standard according to the following sequence. However, the items related to "3.1 Environmental Criteria" are excluded. Also, if the E-Mark Certification Criteria Setting Committee determines that the applying criteria are not reasonable considering the characteristic of the product, it should satisfy the standards that were modified by the committee (test item, test method, standards, etc.).

3.2.4.1

National standards other than Korean Industrial Standards.

3.2.4.2

Overseas national standards or international standards regarding the product quality in question.

3.2.4.3

Standards of the organizations at home and abroad that are referred by the current E-mark target product and certification standard.

3.2.4.4

A private standard that is recognized as higher than the national standard in the industry of the product in question.

3.3 Consumer Information

3.3.1

Indication on the items that the product contributes to the reasons for certification (available resource recycling, reduction of indoor air pollution) during its consumption stage

3.3.2.

Separate indication of product type in accordance with the use of product, if necessary (for indoor, for outdoor and so on)

4. Test Methods

Certification Criteria		Test and Verification Methods
Environmental Criteria	3.1.1	Verification of submitted documents
	3.1.2	3.1.2.1

		3.1.2.2	Test report by an accredited testing laboratory to the following test methods or certificates for the same or higher criteria: <ul style="list-style-type: none"> • Indoor air quality process test criteria (Test method for pollutant-emission construction materials) • or KS M ISO 16000-9 (Indoor air- Part 9: Measurement for the emission of VOCs-Emission test chamber) ; KS M ISO 16000-6 (Indoor air- Part 6: Extraction of active samples from adsorbent TENAX TA, and VOC measurement in indoor and chamber air according to gas chromatography using a thermal desorber and MSD/FID; KS M ISO 16000-11(Indoor air- Part 11: Determination of emission of volatile organic compounds – Sampling, storage of samples, and preparation of test specimens)
Quality Criteria		3.2.1	Test report by an accredited testing laboratory in accordance with Particleboard: KS F 3104 (particleboard), fiberboard KS F 3200 (fiberboard) or certificate of equivalent
		3.2.2	Test report by an accredited testing laboratory in accordance with KS F 3118 (edge glued material for garnering), KS F 3021 (edge glued material for structure), KS F 3022 (wood edge glued board) or certificate of equivalent
		3.2.3~3.2.4	Test reports of authorized institutions pursuant to the standards involved or certificates for same or higher criteria
Consumer Information			Verification of submitted documents

4.1 General Matters

4.1.1

One test sample shall be required for each applied product. However, if more than one test sample is needed, the former requirement may not be met.

4.1.2

Test samples shall be collected at random by a certification institute from products in market or those in storage at the production site.

4.1.3

The result of test shall be numerically set according to KS Q 5002 (Statistical interpretation method of the data – Part 1: Statistical description of the data).

5. Reasons for Certification

“Use of recycled materials, Less indoor air pollutants (confined to the products for indoor use)”

Common Criteria, Notice No. 2012-36, the Ministry of Environment

1. Eco-label products must follow the following provisions with regard to the proper treatment of environmental pollution substances, such as air and water wastes and noxious chemical substances emitted in the process of manufacturing or service operation.

A. When first applying for certification, the product manufacturer should observe the environment related laws and agreements pertaining to the region where the production factory or the place of service operation is located for a period of one year prior to the date of application. Any case of violation of the penalty clause will be verified by confirming documents involved during a period of one year to the date of application. Regarding any violation not related to the penalty clause, confirmation will be made on the completion of appropriate measures.

B. A person who has received a certification of eco-labeling shall observe the environment related laws and agreements pertaining to the region where the production factory or the place of service operation is located during the period of certification. However, regarding any violation besides a penalty, confirmation will be made on the completion of appropriate measures.

2. As a general rule, information for consumers shall be indicated on the surface of the product in such a way not to be easily erased. However, in case that indication on the surface of the product is impossible or undesirable, it can be indicated on the appropriate part such as product packaging, product guidebook and user's manual that consumers can recognize. However, the service information should be indicated inside and outside of the place of service operation. In case that indication inside and outside of the place of service operation is impossible or undesirable, it can be indicated on the appropriate part such as an agreement, letter of delivery, letter of guarantee, and PR materials that consumers can recognize.

3. In order to establish fair trade and to protect consumer, the applicant for eco-label and the holder of eco-label license shall observe the Act on the Fairness of

Indication and Advertisement with respect to the environmental aspects of the product.

4. For Various standards referred in the certification criteria by target product, the latest revised edition applies at the date of application, if not specified otherwise.

5. In applying the quality related criteria for each target product, if no standard is available that can be applied as the quality criteria, the president of Korea Environmental Industry & Technology Institute (KEITI) (hereafter referred to as "president of KEITI") may establish and operate the quality criteria for the product involved after review by a competent committee.