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Title: ECOMARK – ECOLOGICAL PRODUCTS CERTIFICATION

Contact Adress: Merkez Mahallesi Dr Sadık Ahmet Cd, No 38/44 A Bağcılar/İstanbul –

Turkey

Contact Mail: info@ecomark.com.tr

Website: www.ecomark.com.tr

Phone: +90 212 702 50 00

#### **ABOUT US**

A directive numbered 1980/2000 (EC) was issued by the European Union in 2000 within the scope of harmonization laws. This directive sample is required to draw a circle on the contour lines. The directive in question calls for the removal of the environment and the removal of this product with the target target indicated in the environmental labeling. Ekomark © Standard has prepared this product to be grown in aquaculture products that are not grown in aquaculture products and in aquaculture standards. While designing this standard, the Eco-Label Regulation 66/2010/EC updated by the European Union and updated in 2010 was taken as a basis for certification studies. The example of the products within the scope of use in the Ekomark © Standard is in line with the application given by Europe.

#### 1. Entrance

This guide guides the applicant and authorized bodies through the process of verifying eligibility within the ecomark application and criteria in accordance with the requirements of compliance with the criteria published in the Commission Decision 2017/176 o f 25 January 2017 on the creation of Ecomark criteria for wood, mushroom and bamboo based floor coverings.

Specific evaluation and verification requirements are set out in each criterion in Commission Resolution 2017/176/EC, but this User's Guide provides additional information to provide all necessary documentation, statements, analyses, test reports and/or other evidence to demonstrate compliance with the criteria to be arising from the applicant or its suppliers.

In the event of supplier changes, formulation or extension of a product range that may affect compliance with one or more criteria, the licensee shall provide the Competent Authority with information indicating how the product will continue to meet the affected criterion/a prior to any change.

When appropriate, test methods other than those specified for each criterion are used if used as equivalent. The decision must be taken at the level of the Ekolbelling Board (EUEB). The applicant approves the club before submitting the application, equivalent to any proposed alternative test method.

While this document does not aim to subsede the criteria, it does serve as support for its interpretation by focusing solely on useful explanations and explanations. Criteria text appears only when additional information, descriptions, and descriptions are needed; if not, only the criteria name appears as a title. following symbols are used in this Guide

This User's Guide contains three supplements:

Appendix I: Application form – This section contains the application forms or templates to be filled out by the applicant.

Appendix II: Declarations – This section contains statements or templates to be completed as part of the application process.

• Declaration A wood, mushroom and bamboo based floor covering product from the manufacturer. The applicant shall fill out and submit a Declaration A for each product applicable to Ecomark.

Declaration B from the manufacturer/supplier of each raw material. The applicant shall submit a Declaration B by each raw material or every raw material/supplier in the production t applicable to Ecomark. Each Declaration B is completed by the applicant (if he/she has the necessary information) or by the raw material supplier.

Appendix III: Checklist – This section contains a checklist that lists/collects all the documentary evidence required to demonstrate compliance with each criteria. Serves to support the applicant in the data collection.

Please read this guide before completing and submitting application forms, declarations and other documents.

#### 2.Role of third-party testing

As defined in EN ISO 17025, a third-party test locatory must demonstrate that it is impartial and free from unnecessary commercial, financial and other pressures that may affect the technical judgments of both the lotrah itself and its staff. Procedures should be applied to ensure that external persons or organizations that go to the testing locomonel cannot affect the results of the tests performed.

With this in mind, a third-party testing locatory will be as independent as necessary in relation to the conditions under which they perform their services. This means that a third-party test locator and the personnel conducting the tests will not be designers, manufacturers, suppliers, installers, buyers, owners, users or maintainers of the flooring they test, authorized representative or subsidiary of any of these parties.

A thi rd-party test locomoto and its staff shall not engage in any activities that may conflict with their independence, judicial abilities and integrity in relation to their testing activities. In particular, they will not be involved in the design, production, supply, installation, use or maintenance of tested products or similar rectal products.

Testing by a third-party independent lorto is common practice in many industries and requires a variety of product certification programs (product marking). Sometimes, it's a mandatory legislative requirement.

The responsibility of the third-party test locomotion should be limited to the correct test results and the responsibility of the decisions or recommendations taken there afterwards. The test locatory should not take any responsibility for the products, materials, products or services tested, as this responsibility is solely and unlimited to the manufacturer.

Competent Bodies will preferably recognize the tests carried out by the lotuvar or test organizations that meet the requirements shown below.

### 3. Supporting product evaluation and verification criteria 1: Product description

Block by tree. They are then processed into floorboards with tongue and groove edges and are pre-finished or finished in place (see below). According to the standards, a distinction is made between:

- mosaic parquet (8mm),
- lamparquet (6-13mm): small size parquet strip without tongue and groove
- solid parquet (> 13mm).
  - Multilayered wood flooring or engineering wood flooring consists of two or three wooden layers, laid at right angles. The upper layer is parked and the following layers are also wood-based products, for example, high density fiber sheet.
  - Wood-plated floor covering, hard floor covering consisting of a lower taka made of a wood-tan panel, with a swap of top wood cladding and possibly a support.
  - Mushroom floor covering means powdered mushroom mixed with binder, and then cured or pressed together with several mushroom swaps (agglomerate / coating) glue. Mushroom coatings have two main classes:
  - Cork tile upholstery in accordance with EN 12104.
  - Engineering cork laying means laying consisting of several layers, including fiberboard with cork as a technical solution for use with agglomerate fungus or finishing wear swap.
  - Bamboo flooring means floor coverings made of bamboo in solid parts or in agglomerates mixed with a binder. There's no standard definition yet.
  - Laminate flooring, in accordance with the definition provided in EN 13329, means a floor covering that is impregnated with aminoplastic, thermoetting resins (usually melamine), printed or tied to a substrate, normally finished with a supporter, with a surface swap consisting of one or more fine swaps of a fibrous material (usually paper). Depending on the production process, two main laminate classes are produced4.
  - High-pressure laminate (HPL): HPL classifies laminates and external exchange of melamine or other resins, usually composed of core paper exchange impregnated with phenol resins. The high-pressure process requires simultaneous application of heat (T>120C) and pressure (>7MPa) to ensure flow and subsequent curing of thermosecond resins to obtain a homogeneous non-porou material with increased density (> 135g /cm 3). Some laminates are produced with a more protective surface coating. HPL thickness usually ranges from 0.5 to 1.0 mm with different appearance categories (roughness, color and brightness). EN 438 defines and classifies such materials.

 Direct pressed laminates (DPL) refer to paper core layers impregnated with phenol or amino plastic resins and materials consisting of materials consisting of a paper surface swap impregnated with amino plastic (usually melamine). The layers are connected together by a lamination process using heat and pressure. The outer layer on one side has decorative colors or design. They are produced in rolls with a thickness of 0.2mm and a weight of around 200g/m 2.

These plates were pressed and glued to a substrate (HPL) or pressed directly into a substrate (DPL). The product is usually complemented by a support (e.g. HPL, DPL, impregnated papers and coatings), primarily used as a balancing material.

Laminate Flooring is also classified depending on their thickness. The thickness varies from about 7-8 mm to 12 mm thick. Thick planks should be more robust and durable, especially if the lower ground is not at an excellent level.

Guidance for compiling the C1.1 BOM and its associated weights

This criterion essentially requires a list of component parts (layers), materials in which they are made, and their corresponding weight.

The material invoice for the floor covering is required to demonstrate compliance with commission resolution 2017/176/EC. The BOM is contained in certain documents (a) or must be detailed and listed by the applicant (b).

- 1) Product or technical datasheets (TDS) are documents that provide detailed technical description and usage of products.
- 2) Environmental product declaration (EPD): an independently verified and registered document that can transmit transparent and comparable information about the environmental impact of the life cycle of products. The relevant standard for EPD is ISO 14025, which is called "Type III environmental declarations". Epd is based on applicable Product Category Rules (PCR) and, although sometimes comes in bulk, usually contains a list of raw materials and/or components used.
- 3) Security data ove (SDS) is a document that provides information about product-related security issues. SDSs are regulated by the REACH Regulation and are obliged to display only classified components or raw materials in section 3. This information must be completed by other materials in the floor covering.

The documents listed above provide the type and quantity of material contained in the final product in bulk as the absolute of the relative values.

b) The BOM for the floor covering must be compiled by the applicant:

When the applicant is unable to provide any (period a) or equivalent of the abovementioned documents, he/she prepares a list of all materials and related weights contained in the final product. Each layer where the floor covering is made must be divided into different basic materials and weights. Suppliers of different components/materials may be asked to complete incomplete information.

See example in Section C1.4 Examples

To systematically compile manifests, it is useful to assign a code number or name to each different component type used in the product, even if it is not explicitly specified in the criteria text (see Tlo 1). Data of the production process of the floor covering, Annex II, Declaration A).' and).

#### C1.2 Guidance to show minimum weight requirement

1. 2017/xxx/EC Commission Decision. requires the contents of at least 80% of wood, mushrooms, bamboo and/or wood, mushroom and bamboo-based materials.

A material based on wood, fungus and bamboo is a material produced by processes other than chips or fibers and resins or binders. To comply with this requirement, the sum of the weight of chips and fibers, and the weight of resins or birs found in based materials, should be higher than 80% of the weight of the entire floor covering. See the example in section C1.4.1.

Upholstery cannot contain synthetic fiber in any of the composition layers.

#### C1.3 Guidance for classifying the type of floor covering

It is important that the type of floor covering is properly classified, since along the specified criteria there are different thresholds that must be observed depending on the floor covering.

The classification of floor coverings (see definitions above) is based on the technical description of the floor covering. The technical description should provide information about:

- 1) parts and materials where floor covering is formed,
- 2) dimensions (plank size) and
- 3) installation requirements.

This information is complemented by a description of the production process and technical drawings. The manufacturing process indicates whether the floor covering is made of a multilayered or solid element, if it is not finished or finished, and what surface treatment it takes. In any case, additional information required to properly characterize the type of floor covering:

- 1) The brand/trade name, which means all the names of the item, is marketed in the community market. This information avoids confusion between the trade name and the chemical or technical name.
- 2) The description of the product consists of technical drawings showing the parts or materials used in the final product. "Component part" means each of the layers, the material, shape and form of the floor covering, which provides a certain function. For example, it includes a wear or scratch-resistant plug, pattern or coating layer, substrate or style layer, and support layer.
- 3) The description of the production process is detailed information about the procedures followed for the manufacture of floor covering and the suppliers of raw materials and substances. This information clearly indicates whether the floor covering is made of solids. Small parts combined with materials, chips or binders and, if so, what types of binders or adhesives were used and at what temperature and pressures in each of the production steps.

Technical documents describing the product will be provided to the competent authority electronically and in an easily accessible file format, preferably as PDF.

#### C1.4 Examples

In Annex II of this User's Guide, you find a template for compiling and reporting the technical description of the floor covering, including the applicant, BOM, technical drawings, production process, etc.

The following to and figures show some examples of the BOM in the EPD of different products and examples of how to report product drawings and the manufacturing process.

### C1.4.1 BOM examples:

The floor covering of table 4 complies with the minimum weight requirements, as the amount of fungi exceeds the weight of the total floor covering by more than 80%. This value should also be reported as the total amount of mushrooms in Criteria 10. Consumer information(See see section C10.1)

#### 2. Wood, mushroom and bamboo based material

#### Criteria text:

This requirement is applied to wood, wood-based, mushroom-based, bamboo, bamboo-based materials weighing more than 1% of the finished product.

Not all wood, wood-based, mushroom, mushroom-based, bamboo, bamboo-based materials will be sourced from genetically modified organisms (GMOs) and will not be covered by a chain of inspection certificates issued by an independent third-party certification program such as the Forest Management Council (FSC), the Forest Certification Approval Program (PEFC) or its equivalent.

All virgin wood, mushrooms and bamboo will be covered by valid sustainable forest management certificates issued by an independent third-party certification program such as FSC, PEFC or equivalent.

Where a certification scheme allows the mixing of uncertified and/or recycled materials and uncertified materials in a product or production line, at least 70% of wood, mushrooms and/or bamboo will be sustainable certified virgin materials and/or recycled materials.

Uncertified material will be covered by a verification system that ensures that it is legally source-coded and meets other requirements of the certification program in relation to uncertified material.

The certification bodies that issue forest and/or chain custody certificates will be accredited or recognized by this certificate program.

#### **Evaluation and verification**

The applicant shall provide a declaration of conformity for all wood, wood-based mushrooms, mushroom-based, bamboo, bamboo-based materials used in the product or production line, supported by a valid, independently certified inspection chain certificate of the manufacturer and indicate that a virgin material is supplied from GMO. Appli cant will provide audited accounting documents showing that at least 70% of materials originate from forests or areas managed in accordance with the principles of Sustainable Forestry Management and/or recycled resources that meet the requirements set by the relevant independent chain of oversight. FSC, PEFC or equivalent schemes will be used as independent third-party certificates.

If there is uncertified material in the product or production line, the uncertified Virgin material does not pass 30% and dir closed by a verification system which right-handers it is legally sourced and meets the other requirements of the certification program in relation to certification.

Bambusa has hollow woody walled stems with ringed joints and edible young shoots.

Certification scheme: Today the two largest international forest certification programs are the Forest Management Council (FSC) and the Forest Certification Approval Program (PEFC). It is usually used that the main features of certification programs consist of the following three elements:

1)Standard: The content of the standard (e.g. FSC or PEFC) determines the requirements that must be met in the forest or area. There are no a number of universally used detailed requirements that define SFM. However, there is a general agreement that the requirements should address legal, technical, environmental and social issues.

Standard setting: this is a standard developmentprocess, including decision-making and representation from different stakeholder groups. Standards were developed by standard setting organizations (for example, FSC members or workgroups for the national standard setting in PEFC). Itis related to the different types of certificates of theproducts, the different origins of forestproducts, the stages of production and then the progress of forest products through the value chain.

- 2)Certification process: This is the process of determining whether standard requirements are met, usually not buried by a certification body or certificate holder.
- 3)Accreditation: This is the mechanism for ensuring that the organizations that undertake certification are competent and produce reliable, consistent results. Accreditation is undertaken by an accreditation body. In addition, mechanisms are also required to check for products from certified forests or fields, if they will be used as a basis for identifying and making requests. This includes:

- Monitoring: A mechanism is required to monitor materials in the certified forest at each stage. This usu ally is called the chain of detention (see under the chain of detention certificates).
- Product labeling and claims: rules for product labeling and marking claims to ensure that claims on certified products are clear and accurate (see under the chain of custody certificate).
- Genetically modified organisms (GMOs) mean an organism in which genetic material, excluding humans, is altered so that it does not occur naturally through mating and/or natural recombination. Under this definition:
- (a) genetic modification at least in section 1 of directive 2001/18/EC.
- (b) The techniques listed in Annex I A, section 2 (DIRECTIVE 2001/18/EC) do not result in genetic modification;
- Sustainable forest management (SFM) means management and use of forests and forest lands that, in some way and to some extent, protect their biodiversity, productivity, regeneration capacities, vitality and potential to perform relevant ecological, economic and social functions at the local, national and global level now and in the future, and do not harm other ecosystems. However, this definition is too broad to be easily evaluated and must be completed by defining the principles and/or criteria that guarantee compliance with those defined by intergovernmental processes:
- Three pillars of sustainable development, namely economic activity, environmental protection and social protection.
- National laws and international convections (legality).

Chain of Custody certification (CoC) is a tool/system that verifies that certified material is detected or kept separately fromunappreciated or unchecked material through this chain. The CoC system must be in place from the forest unit to the final point of sale, providing a connection between the SFM certified material in the product or product line and the certified forest unit. Mixing of SFM certified and non-SFM certified products should be carried out under controlled procedures that meet CoC requirements.

CoC certification allows companies to label their products with the stamp of the certification scheme (e.g. FSC or PEFC), enabling consumers to identify and select products that support responsible forest management. Minimum rules for logo and label e and compliance oversight in D:

- 1) Features of logos and labels.
- 2) Definitive description of the claim represented by the logo or label,

Guidance to ensure materials originate from forests or areas managed according to Sustainable Forestry Management (SFM)

Criterion 2 applies only to wood, mushroom, bamboo, wood-based, mushroom-based or bamboo-based materials whose weight exceeds 1% of the finishing product.

Post-consumer recycled material (wood fibers, wood chips, etc.) where used, it will comply with the requirements of Criterion 4. Specific item requirements

Various points have been identified as important considerations in defining SFM principles and criteria at forest management unit level. These points include:

- 1) Legal framework
- 2) Forest health and vitality
- 3) Production function of forest resources
- 4) Protective function of forest resources
- 5) Protection of biodiversity
- 6) Scope of forest resources
- 7) Social requirements

When evaluating the validity of a Certification program to comply with SFM principles, it is important to ensure that it covers seven aspects of the criteria and the basic/important requirements of each direction. Forest Management Council (FSC), Forest Certification Approval Program (PEFC) or other equivalent certification programs used as independent third-party certification are valid.

The club of an equivalent certification plan will be decided by the Ecomark.

Guidance to ensure that the non-C2.2 SFM certified material meets other requirements of the certification program

Certification programs require certified organizations to refrain from materials from unsubscribed sources and not to use them in certified products. The following types of materials are used as non-useable and are prevented in FSC and PEFC labeled products through controlled material supply.

- 1) Illegally harvested wood;
- 2) Wood harvested in violation of traditional and civil rights;
- 3) Wood Harvesting in Forests Where High Conservation Values Are Threatened by Management Activities
- 4) Wood harvested from natural forests converted to out-of-forest use
- 5) Wood from genetically modified trees

As long as the amount of certified material is higher than 70%, the certified material and controlled material of the same scheme are mixed in a non-SFC certified but controlled product with an FSC or PEFC label.

C2.3 Guidance to ensure that the inspection certificates (CoC) of a certificate program of materials are met by the chain

Between the forest and the end user, products can go through many stages of processing, production, and distribution. CoC is a traceability system from the forest unit point to the end point of sale, as described in the definitions. A certification system requires the CoC to meet the following requirements:

- 1) Not every company in CoC pos voices an operational CoC system with a management system that provides sufficient guarantee that the requirements of the CoC standard are met.
- 2) Each organization records the quantities and names and certificate numbers of organizations where it buys wood, mushrooms or bamboo or wood, mushroom or bamboo-based materials and sells wood, mushroom or bamboo-based materials.
- 3) If the system allows mixing of SFM certified and non-SFM certified material, the non-SFM certified material is covered by a system that is unquestionably verified to ensure that it is from legal sources at least. This applies to new ones, including pre-consumer rekycled material and post-consumer recycled material.
- 4) SFM certified material, materials from other verified legal sources and materials obtained from unverified legal sources are administratively separated. Materials obtained from unverified legal sources are also physically separated from the other two sources.
- 5) If the system allows mixing of SFM certified and non-SFM certified material, one of the following approaches will be used:
- mass balance demand: The ratio of the product sold as an SFM certified material is equal to the proportion of SFM certified material entering a process. This mechanism requires the separation of SFM certified and non-SFM certified raw materials at all stages of the company'sproduction/trade process to ensure that SFM certified raw materials are mixed with non-SFM certified raw materials. When the physical separation method is used for a product with percentage-based demands, each delivery must be processed or processed separately.
- percentage-based demand: The percentage of SFM certified material in a product or product line is reported. This mechanism allows mixing of SFM certified and non-SFM certified raw materials during the production or trade process. The percentage of SFM certified raw materials should be known and transmitted to the company's customers (average percentage). Alternatively, the company sells its

production rate SFM certified, which is equal to the percentage of SFM certified raw materials used (volume credit)

Products that have at least 70% of PEFC or FSC certified material and have maintained the chain of custody will be allowed to display the relevant schema certification logos.

Guidance for accounting for C2.4 SFM certified and non-SFM certified (controlled) material

Accounting documents are required and audited in coC certified organizations. This document is important for manufacturers that follow a percentage-tan method instead of a physical method of allocation method. The percentage-defined method applies to organizations that mix certified material with other material categories. Accounting must be associated with a product group consisting of a single product type or the same or similar input material, manufactured or manufactured by the organization in a single production location. The material that falls into the product group will have the same unit of measure or units that are transferred to the same unit of measurement.

If any conversion rate and method are applied, the percentage is calculated as a simple percentage or rounding percentage. Transferring the calculated percentage to the outputs is done in two ways:

- 1) the average percentage method for which the organization will use the calculated certificate percentage for all products covered by the product group has been made by calculation and
- 2) the bulk credit method by which the organization calculates the loan volume using one of the following:
- certification percentage and volume of output products: Bulk loans are calculated by multisessing the volume or output products of the demand period by the percentage approved for the relevant demand period
- input material and input/output ratio The organization first shows a veriified ratio between the input material and the output products, and secondly calculates the volume credits directly from the input certified material by multiplying the volume of the input certified material by the input/output rate

This credit volume is included in the credit hex. The total amount of loans accumulated in the credit heir cannot exceed the total amount of loans entered into the credit heir in the last 12 months. Where production takes longer, the maximum period of 12 months is extended. For the output covered by the credit hemis, the organization must dispens the credit volume from the credit hemiste as containing 100% of the certified material or containing less than 100% certified material and meeting the requirements (>70%). The result of multiplying the volume of certified products by the percentage of output of the certified material included in the certified

products will be equal to the distributed volume loans withdrawn from the credit hemis.

There is a significant difference between the accounting documents required by the FSC and PEFC certificate programs and the Ecomark scheme. The account document required by Ecomark will include the amount of certified wood, mushroom, bamboo-based material uniquely labeled as an Ecomark product and will be deducted from the total credit hemiste, which cannot be sold twice (see Example 1 in double labeling and Example 2 in double labeling).

### Criterion 3. General requirements for hazardous substances and mixtures

#### Criteria text:

The presence of substances defined as substances (SVHC's) or substances or mixtures that meet classification criteria in accordance with Article 59 (1) of regulation no. 1907/2006, and their presence in any component part of the product, According to Europ ean Parliament and Council Regulation 13 no. 1272/2008 (EC), labelling and packaging (CLP) for hazards listed in Tlo 3.1 of this Resolution (CLP) 3.a. and 3.b. For the purpose of this criterion, Candidate List SVHC's and CLP hazard classifications are grouped according to their hazardous characteristics in tle 3.1.

#### 3.a. Restriction of SVHC

The product and any component parts of them will not contain SVHC's in concentrations greater than 0.10.

% (weight by weight).

Any negativity arising from this requirement shall not be given to Candidate List SVC's, which are located in concentrations greater than 0.10% (weight by weight) in the product or any component part of them.

#### Evaluation and verification

The applicant compiles absence declarations of SVHC's above the specified concentration limit for component parts used in the product and product. The declarations will be made in reference to the latest version of the Candidate List published by ECHA.

3.b. Restriction of CLP classified substances or mixtures used in floor covering

Substances or mixtures used by the floor covering manufacturer or suppliers during the preparation, manufacture, installation or other treatment of the floor covering shall not be classified with any of the CLP hazards listed in Tlo 3.1. Restricted substances or mixtures will not contain adhesives,

dyes, linings, varnishes, stains, resins, biocidal products, fillers, candles, oils, joint fillers, dyes and sealants. However, the use of such restricted substances will be allowed if at least one of the following conditions applies:

- -restricted substance or mixture was used in quantities less than 0.10% of the total weight of the floor covering and in any component part of them;
- -after the restricted substance is processed (for example, it no longer becomes bioavailable or reacts chemically) so that the restricted CLP hazards are no longer applied, and any remaining content of the restricted substance is less than 0.10% of the floor covering and the total weight of any component part.

#### Evaluation and verification

The applicant and/or its suppliers shall provide the competent authority with a declaration of conformity to criterion 3.b, which, where appropriate, is supported by a list of hazard classifications or classifications, additional quantities and, if appropriate, whether the substances change their properties after processing, and a list of related substances or mixtures used in conjunction with the declarations so that restricted CLP hazards no longer apply. In this case, the quantities of any remaining unpublished content of the restricted substance will be provided.

The following information is provided regarding the hazard classification or nonclassification of each of the substances:

- i. chemical abstract service (CAS), European Community (EC) or other list number of the substance (when available for mixtures);
- ii. physical form and condition in which the substance or mixture is used;
- iii. harmonized CLP hazard classifications;
- iv. Self-classification entries in ECHA's REACH registered item database (if there is no harmonized classification);
- v. Mixture classifications according to the criteria specified in regulation no. 1272/2008 (EC).

Given the self-classification entries in the REACH registered item data, entries from common submissions will be given priority.

In cases where classification is recorded as "data deficiency" or "inconclusive" according to reach registered sub-argument data, or when the item is not yet registered under the REACH system, toxicological data that meets the requirements of Annex VII to Regulation (EC) no. 1907/2006 will be sufficient to support definitive self-classifications in accordance with The Additional Management (EC) no. 1272/2008 and the supporting guidelines of ECHA. For "data deficiency" or "inconclusive" database entries, self-classifications are verified. For this purpose, the following sources of information will be shakul:

- i. Toxicological studies and hazard assessments by ECHA peer regulators18, Member State regulatory bodies or intergovernmental organizations;
- ii. A fully completed Security DataSheet (SDS) in accordance with Annex II Regulation (EC) no. 1907/2006;
- iii. A documented expert decision provided by a professional toxicologist based on a review of scientific literature and existing testdata, as required, supported by results from new tests carried out by independent lotrates using ECHA-approved methods:
- iv. A certification where appropriate based on an expert decision issued by an accredited conformity assessment body that conducts hazard assessments according to the Global Harmonized System (GHS) or CLP hazard classification systems.

Information on the dangerous properties of substances is generated in accordance with Annex XI Regulation 1907/2006 (EC) by means other than tests, for example by using in vitro methods, quantitative structure activity models, or alternative methods such as grouping or reading.

### C3.1 –C concentration limit and how compliance is shown

Criterion 3.a and 3.b are applied for the substances and mixtures contained in the final product and any component parts of them, as defined in criterion 1, limiting their concentration to up to 0.10% in weight.

The applicant will verify compliance with the 0.10% w limit for each item for all component parts used in the floor covering product and the last coated product as a whole. The 0.10% limit for W/w refers to the total weight of the product or the weight of the component parts of the product. Component parts are used as each of the layers created by the floor covering. List of component parts 1.

#### C3.2 - Guidance to demonstrate compliance with Criterion 3.a

This criterion requires that none of the SVHC Candidate List (Very High Items of Concern) are available, or that the concentration of such substances, if any, is less than 0.10% of the weight of the final product and any component part. The applicant must refer to the latest version of the Candidate List published by ECHA.

### C3.3 – Guidance to demonstrate compliance with Criterion 3.b

Criterion 3.b requires that none of the substances or mixtures contained in the final product be classified with any of the CLP hazards listed in Tlo 3.1 of Commission Resolution 2017/176/EC.

It should be noticed that the use of an item or mixture classified as raw material in production does not mean that the floor covering (as the final product) contains this classified substance or mixture.

Possible approaches to demonstrate compliance with this criterion are as follows:

- 1) Testing the final product: This approach will require a large number of tests, since the number of classified substances is large.
- 2) Start and control from the raw materials used in the production of the product:
- a. If the substances or mixtures used do not have any limited hazards
- b. If the substances or mixtures used have limited hazards, but the weight of the product and any component part of them is used in quantities of up < 0.10%
- c. If the substances or mixtures used have limited hazards and are applied in quantities
- > 0.10% of the product and any component part, but changes its properties during processing, so that the restricted hazards are no longer applied, and any unpublished content of the restricted substance < 0.10% of the product and any component part of it, and finally
- d. check that chemical reactions in the production process do not produce any hidden substances with limited hazards.

#### C4.1 (a) - Explanations on criteria 4.a

Criterion 4 applies only when recycled wood, mushrooms and bamboo are used.

If recycled fibers or chips are used, Tloda will comply with the limits of the specified pollutants.

4.1 Criterion 4.a and will be tested in accordance with the "European Panel Federation (EPF) standard for the delivery conditions of recycled wood" in October 2002, or by another equivalent standard with equal or stricter limits.

An alternative test method for recycled wood is RAL-GZ 428 (from Germany), which is used as a method with similar accuracy (repeatability and repeatability).

If a different standard is used than EPF, it is recommended to check the following issues to decide whether it can be used as equivalent or stricter (not a comprehensive list):

- Test sampling and frequency;
- Types of material that are not used;
- Quality and cleanliness;
- Moisture content;

- Delivery requirements;
- Reference test methods.

Use of this or any other alternative method should be used at the Ecomark board level.

### C4.b. Biyosidal Products

#### C4.2 (b) - Descriptions of the criteria 4.b

Although the use of biocidal products, preservatives and active substances in the treatment of wood, fungi and bamboo is not allowed in the 4.b criterion, these substances are used if they are part of the intra-blood water-based mixtures used in the production process and comply with the requirements described in the 4.b criterion.

In-house water-based mixtures used in the production process, such as adhesives or varnishes, are sensitive to microbiological contamination and age of deterioration and require the inclusion of an in-box protector to ensure protection and a suitable shelf life during production.

In accordance with the Regulation on Biocidal Products (BPR, Regulation () 528/2012), definitions of biocidal products, preservatives and active substances are contained in the text of commission resolution 2017/176/EC.

Verification of the requirements for active substances for the protection of water-based mixtures in the tin should be done by checking the components in the SDS of the water-based mixtures used in the production process. For example, if a tin water-based solution has 15 ppm or more of the CMIT/MIT mixture, the entire solution is classified with H317 (Skin Sens 1) and the CMIT/MIT mixture will appear in the components contained in the solution's SDS.

4 to demonstrate compliance with this criterion. SDS of water-based preparations must be provided.

#### C4.c. Heavy metals in paints, primers and varnish

### C4.d&C4.e. Surface treatment in Voc content (C4.d) & Other used Substances and Mixtures in Voc content (C4.e)

Surface treatment products used in wood, wood-based, mushroom, mushroom-based, bamboo or bamboo-based materials will have one of the following:

- total VOC content less than or equal to 5% in weight (in-can substance concentration);
- a VOC content greater than 5% in weight, provided that the total VOC content is applied in quantities less than 10 g/m2 of the treated surface area.

The criterion relates to the total VOC in surface treatment products and the chemical composition they have in wet form. If the products require dilution before use, the calculation should be based on the content in the diluted product.

For the purposes of this criterion, VOC means the volatile organic compound defined in Article 2(5) of Directive 2004/42/CE of the European Parliament and Council20.

This criterion does not apply to mixtures (e.g. nodes, controls, dents, etc.) used for the repair of the manufacturing process.

#### Evaluation and verification

The applicant shall declare compliance with this criteria supported by the SDS of any surface treatment agent or mixture used on wood, wood-based, mushroom, mushroom-based, bamboo or/and bamboo-based materials. If the SDS indicates that the VOC content of the surface treatment agents or mixtures used is less than or equal to 5% in weight, no further verification is required.

If VOC content information is not included in the SDS, the VOC content will be calculated from the list of items in the surface treatment mixture. The concentration of each VOC component should be indicated as a percentage in weight.

Alternatively, if the VOC content is higher than 5% in weight, the applicant will provide a calculation indicating that the effective amount of VOC applied per m2 of the machined surface area of the floor covering is less than 10 g / m 2, in accordance with the guideline provided in Annex I.

4.e. VOC content in other substances and mixtures used

VOC content will be less than:

- 3% weight in weight in both in-life adhesives and resins used in the production of floor coverings;
- 1% weight in weight in other substances other than intra-blood adhesives, resins and surface treatment (criterion 4.d) used in the manufacture of floor coveringings.

The liquid aminoplast resins used in the production of floor coverings should be less than 0.2% according to the weight of free formaldehyde.

The criterion relates to the total VOC in substances with a chemical composition that they have in wet form. If mixtures require dilution before use, the calculation should be based on the content in the diluted product.

For the purpose of this criterion, VOC means the volatile organic compound defined in Article 2(5) of Directive 2004/42/CE of the European Parliament and Council.

This criterion does not apply to mixtures (e.g. nodes, controls, dents, etc.) used for repair during the manufacturing process.

#### **Evaluation and verification**

The applicant shall provide the competent authority with a complete description of the declaration of conformity and determination of quantities and CAS numbers to the criteria supported by the SDS of any intra-blood adhesives, resins or other substances used, or equivalent documents supporting the declaration of conformity.

If the SDS indicates that the VOC content is less than 3% weight according to the weight of the intra-blood adhesives and resin used, or less than 1% weight of other substances used, no further verification is required.

#### **Definitions**

- VOC content: Standing for volatile organic compounds, VOC is defined in Article 2(5) of Directive 21 of the European Parliament and Council as any organic compound with a starting boiling point of less than or equal to 250 °C measured at standard pressure of 101.3 kPa.
- Surface treatment: refers to all techniques aimed at providing two-way basic functionality:
- a) protect the underlying material (wood, mushroom, bamboo-based materials) from deterioration in the adjacent environment and
- b) to decorate or improve the aesthetic aspect of the surface.

Protection against physical and chemical attacks, including water, chemicals, UV light and dirt, should be ensured. Aesthetic aspects refer to features such as color performance, brightness and desire surface structure.

The basic principle is based on the fact that most of the wood species, fungi and bamboo are hygroscopic and absorb stains and varnish in different ways, depending on their porosity and cell structure. To facilitate the application, surface treatment is the opposite of VOC.

• Mixtures used for repair (e.g. nodes, controls, dents, etc.): Defects and accidents always occur during the manufacture of floor coverings and during the final smoothing of any piece of wood, fungus or bamboo. This is simple paints and dents, such as controls, knots or inks, as a result of collisions or defects in wood, mushrooms or bamboo. All these problems are repaired using different mixtures during the production process. For example, a damaged piece of wood, fungus or bamboo with cavities or nodes in it is repaired by adding wood paste (a widely used mixture to repair logs). This treatment does not preserve the appearance of nodes. However, if a smooth surface is desired to maintain the appearance of nodes, the solution is to fill the wood, mushroom or bamboo nodes and cavities with epoxy.

To allow this repair process during manufacturing, the substances and mixtures used for repair are exempt from criteria 4.d and 4.e. The basic principle is based on the fact that the products used for the repair of materials in the manufacturing process contain a high amount of VOC to facilitate their application in nodes, controls, pussy ounces, dentes and other deformations of the desired shape of the final product. However, they go through a curing process that becomes a solid matrix.

• Effectively applied VOC quantity: If the VOC in the surface treatment productis higherthan 5%, the applicant must demonstrate compliancewith Criterion 4.d, indicating that the effectively applied VOC amount is lessthan 10 g / m2. The effective amount of VOC applied is the result of the formula specified in Appendix I of commission resolution 2017/176/EC. It depends onthe technology used for the application ofthetreatment product. Each technology has an activity factor attributed in accordance with Appendix 4.2.

### Method/technology

Irreversible automatic spray application Most automatic spraying systems use a device that moves the spray tangiers and controls the application. Programmable logic controllers (PLCs) use part recognition systems to trigger weapons, initiate color change and adjust equipment for optimum efficiency. In addition to the control of paint application, PLCs are used for paint mixing, color changes and other control tasks.

Spray application, electrostatic: The differences between this and air spraying are that the electrostatic tangier is an electrode in the nozzle and the object to be painted is grounded. The electrode passes through the paint at 60,000 volts at 225 microampers. The loaded paint is drawn to the grounded object. This requires less pressure, produces less excess spray and uses relatively little paint. Electrostatic weapons are good for painting oddley-shaped objects. They also produce a uniform coat, since the paint itself acts as an insulator; the object cannot receive any more paint after it is covered. The disadvantages are: only one coat is possible, only conductive materials are painted; it is more expensive, slower, has higher maintenance costs, is limited to rechargeable paints, and the surface of the object should be extremely clean. Since the weapon uses electricity, this method is possible shock hazard.

Spray application, ringtone/disc One method is to use the electrostatic force generated by the high-voltage differential between a paint dispenser and grounded work. This force creates atomization, fragmenting the material and accumulating the material on the object to be covered. No air or hydraulic force is used. This method is sometimes referred to as "real electrostatic painting". The material is fed to a rotating disc or belle. A certain speed causes the material to flow to the edge with the centered force, but it does not disperse. The disc or bell I charged to 120,000 voltS is D.C. Negative (excess electron).

Roll coating The paint is applied to the auxiliary cylinders, then transfers the paint to the application cylinders, stretching through the part. This method has high transfer efficiency and high production rates, but is limited to flat operation.

Curtain covering Curtain coating uses a waterfall paint flow to cover parts on a conveyor belt, rather than many paint streams. Curtain coating has high transfer efficiency and properly covers parts, but is suitable only for flat work. Finishing quality is extremely dependent on the viscosity of the paint.

Vacuum coating In vacuum processing, the coating is pumped into the coating chamber. The coating is then atomized using suction air and suctioned from above to the outside of the room, allowing it to re-circulate. In this way, an equal paint mist is formed inside the room; the item to be covered is then fed through fog. Everything will be covered during this process. The object then emerges from the coating room through a precisely measured opening that wipes the extra coating off the surface of the object. The suction air flowing into the room along the surface of the object also carries the extra coating in the berer he went back to the room and was circulated. 22th

• Free formaldehyde: there is no standard definition for "free formaldehyde", the test methodology depends. Criterion 4.e requires that if liquid aminoplast resins are used in the production of floor coverings, their free formaldehyde should be less than 0.2% from w / w. This must be demonstrated in accordance with EN 1243 standard.

C4.3 (d/e) – Guidance for VOC content limit values required by the criterion 4.d and 4.e

These sub-criteria determine requirements for VOC content in surface treatment (4.d)

and other substances and mixtures used in the manufacture of floor coverings (4.e).

Restrictions of VOC content are limited depending on the function of substances and/or mixtures, as shown in Tlo 6.

VOC content refers to wet form in all cases. If the substance or mixture needs to be diluted before use, the VOC content should be calculated according to the ready-to-use form (after dilution).

C4.4 (d/e) - Guidance for evaluating VOC content

VOC content should be evaluated according to the information contained in the SDS of substances or mixtures used in the production of floor coverings and the dilution rate (if necessary) before use. If so, it should be noted that the information in the SDS will refer to the concentrated product, and the data for verifying the criteria will refer to the diluted product.

Two possible approaches to evaluating the VOC content of substances or mixtures are as follows:

- 1) Information about VOC content may be included in the SDS, which indicates the total amount of content classified as VOC. This information, if included in the SDS, is available in section 9.2, although not mandatory.
- 2) If VOC content information is not included in the SDS, it must be calculated according to the BOM or the ingredient list of the chemical product. In this case, the first boiling point value of each component must be declared in accordance with the VOC definition applicable to criteria 4.d and 4.e: "If the first boiling point ≤250 °C is measured at standard pressure of 101.3 kPa, the component is used as VOC ". See example in section C4.5

C4.5 (d/e) – Example of calculations for evaluating and verifying VOC content from the content list

The floor manufacturer uses the Y product as glue. The product contains four components (A, B, C, D) and requires 5 parts of water to be diluted into 1 piece of product (5:1) before it is applied.

In accordance with the 4.e criterion, the VOC content of the mixture will be less than 3% for use in an Ecomark floor covering.

Step 1: Collection of information

\*RTU: Ready to use

Each component must be defined by the CAS no. The amount used for each component must be recorded in the 'content in mass' column (for example, in grams) or as 'content in %' (as a percentage of mass).

Step 2: Identification of VOC substances

Boiling point, VOC"Boiling point ≤ 250 °C

The component measured at standard pressure of 101.3 kPa is used as VOC". According to this,

As shown, the calculated VOC content for the Y product used as glue is higher than 3%, and as a result it cannot be used on an Ecomark floor covering.

C4.6 (d/e) – Example of calculations for evaluation and verification of VOC content in surface treatment using effective ratio (Criterion 4.d)

The floor manufacturer uses 3 products to provide surface treatment and cylinder coating technique (95% efficiency rate in accordance with Tlo 4.2 in Annex I of the 2017/ccc/EC Commission Decision).

#### Products include:

- Product A has a VOC content of 6% and is applied in two layers with 10 g / m2;
- Product B has a VOC content of 7% and is applied with only one coat of 20 g/ m2;
- Product C has a VOC content of 5.5% and is applied with 10 g/m2 for one coat.

Tlo 7 is populated with the data provided in the example above. Since the products used in surface treatment exceed the VOC limit of 5%, the applied quantity method will be used.

For this reason, the surface treatment system applied a total VOC content of 3 g/m 2 weighted, which is lower than the limit value of 10 g/m 2. Surface treatment then complies with the 4.d criteria.

Guidance to demonstrate compliance with the C4.7 (f) – C4.f criteria

Criterion 4.f applies to phase plasticizers with hazard classifications described in Article 57 of the REACH Regulation.

The list of components of adhesives, resins and surface treatments will be scanned to show that they do not contain phthalat plasticizers that meet the criteria of Article 57 of the REACH Regulation (EC) no. 1907/2006, or if so, the total weight of the listed phthalates is less than 0.10% of the weight of the adhesive, resin or surface treatment.

Section 57 of the REACH Regulation. The statements of Article 57 are as follows:

The phthalate plasticizers used are not used in section 57 of the REACH Regulation. An important source of information to verify whether it meets the classification criteria described in article ECHA Classification and Labeling (C&L) Inventory:

Section 57 of the REACH Regulation. To provide examples of phthalates that meet the criteria of the article, the phthalates on the SVHC Candidate List at the time of writing of this guide are as follows:

- di-n-butyl fitalat (DBP),
- benzil butil fitalat (GDP),
- bis-(2-etilheksil) fitalat (DEHP),
- diisobutyl phthalat (DIBP),
- dihexyl fitalat (DnHP),
- dipentil fitalat (DPP),
- diizopentil fitalat (DIPP),
- bis(2-metoksiyetil) fitalat (DMEP)

Note that this will not be a comprehensive list. The criterion can affect more substances. The applicant must comply with Section 57 of the REACH Regulation to assess the compliance with the absence of phthalates in a diabolical way.

Each phase plasticizer banned in adhesive, surface treatment or resins should be less than 0.10%. Use of any plasticizer (as a single substance) must meet the criteria of 3a and 3b

When information on phthalate content is inadequate and it is not possible to obtain a declaration of conformity in accordance with the criteria, adhesive, resin or surface treatment will be tested in accordance with ISO 8214-6 standard. This standard specifies a method for the determination of di-n-butyl phthalate (DBP), benzyl butyl phthalate (BBP), bis-(2-ethylhexil) phthalate (DEHP), di-2-ethylhexate. n-octyl phthalate (DNOP), di-iso-nonyl phthalate (DINP) and di-iso-decil phthalate (DIDP), and coats, etc. in toys and children's products made of plastic, textiles.

#### C4.8 (g) - Description of halogen organic compounds

Organic compounds with halogens, one or more halogens (F: fluorine; CI: chlorine; Br: bromine or I: iodine) is a combi ned with carbon and other elements, which leads to the formation of organophlurin , organoclorine, organobromine and organoiodine compounds.

Examples of halogen organic compounds include benzyl bromide, vinyl chloride, vinyldene chloride, methylene chloride, iodoasetic acid, vinyldene fluoride. More information about these compounds, their chemical properties, risk assessments and their use is found along with a list (not necessarily a comprehensive list):

#### C4.9 (h) - Description of flame retardants

Flame retardant (FR) is a term that is not defined scientifically or legally. However, they collect a wide variety of chemicals with a common function: they are added to materials produced to improve fire safety. FR's prevent or delay the spread of fire by suppressing chemical reactions in the flame or by the formation of a protective plug on the surface of a material.

There are more than 175 different types of FR, commonly divided into four main groups: inorganic FR's, organophosphorus FR's, nitrogen-containing FR's, and halogen organic FR's. Inorganic FR's contain metal hydroxides, boron salts, inorganic antimony, tin, zinc and molybdenum compounds. Inorganic FR's are added to polymers as filler and used immobilely, unlike organic FR's. FR's with organophosphorus are phosphate esters that can contain bromine or chlorine first. Organophosphorus FR is widely used in both polymers and textile cellulose fibers. Nitrogen-containing FR's prevent the formation of flammable gases and are primarily used in nitrogen-containing polymers such as polyurethane and polyamide. The most important nitrogen-based FR's are melamine and melamine derivatives. Halogen organic FR's are usually based on chlorine and bromine. Brominous FR's are numerous from chloride FR's due to their greater efficiency, and at high temperatures, the decomposition products of brominated compounds are less volatile than this structure.

Criterion 5. Energy consumption in the production process

C5.1 Guidance for the classification, accounting and reporting of energy used in the production process

The energy used in the production process should be carefully classified in one or another factor (e.g. Factors A, B or C), depending on its origin.

The energy used in the production process is heat/steam or electricity and can be produced both on site or off-site (heat/steam is in most cases produced indoors). The source of energy is also classified as renewable energy sources or non-renewable energy sources. Figure 9 shows the possible sources of energy.

The standard value of fuels is found in Tlo 5.2 of annex II. If the fuel used is not in this tlo, other values are used as described in section C5.3.

On-site steam-free RES is steam produced by renewable sources that do not use fuel (i.e. Thermal sun).

On-site fuel-free RES is from renewable sources that do not use fuel (i.e. PV panels, wind energy, geothermal, etc.) is on-site electricity.

Off-site RES is out-of-plant electricity from renewable sources. This electricity can be purchased or produced by the same company.

Electricity is the total electricity produced or purchased on site.

In E scoring, only the energy consumed in reality during the production process will be taken into account. Any excess energy (steam/heat or electricity sold) will be deducted from the total fuel and electricity intake.

Purchasing electricity is a mixture of different origins. Electricity bills inform the consumer about the different origins and percentages of electricity provided. Electricity from RES must come with a guarantee of origin (section C5.2).

### **Guidance for C5.3 Origin guarantees**

Origin Guarantees (GOS) are electronic certificates issued for energy proven to be produced from renewable sources. GMO is given for every 1 MWh of renewable energy produced.

In accordance with Directive 2003/54/EC regarding common rules regarding the domestic market in electricity (article 3.6), "Member States shall ensure that each energy source indicates the supplier's contribution to the supplier's overall fuel mix during the prior year, in invoices or invoices and promotional materials offered to end customers."

In addition, directive 2009/28/EC on the promotion of energy use from renewable sources states that "energy suppliers market energy to consumers from renewable sources and the environmental or other benefits of energy from renewable sources may require Member States, these energy suppliers, in summary,to provide information about the amount or share of energy from installations or increased capacity that began operations after June 25, 2009.

In addition, when an electricity supplier must prove the share or amount of energy obtained from renewable sources in the energy mix for the purpose of Article 3(6) of Directive 2003/54/EC, this is done using the guarantees of origin.

Therefore, guarantees ofigin (GO) and related cancellation statements are used to prove the renewable source of on-site or electricity generated and consumed energy purchased from the grid for the production process. Other equivalent evidence tools should be used at ecomark board level. The guarantee of origin will at least state:

- 1) energy source and start and end dates of production;
- 2) whether it relates to:
- a. electricity; or
- b. heating or cooling;
- 3) identity, location, type and capacity of the installation where the energy is produced;

- 4) whether the installation benefits from investment support, whether the energy unit benefits in any other way than a national support program, and the type of support scheme;
- 5) date on which the installation was started; and
- 6) release date and country, and a unique identification number.

The cancellation notice states:

- 1) Cancellation date showing the date on which GO was allocated to beneficiary consumption. "from" indicates who initiated the cancellation and gives more details about the "to" beneficiary
- 2) The total GO in MWh is the total energy generated by the power plant, and the certificate Number is a unique code for each MWh GO (the number of unique codes must be the same as the Total GO)
- 3) The country in which domain GO was issued and the EXPORT date indicates when GO was created
- 4) The production device provides information about the details such as public information, name of the power plant, installed capacity, location, technology, fuels.

The revocation notification example is shown in Figure 10.

The cancellation notice is filled with information that can be transmitted within end customer corporate social responsibility campaigns.

Guarantees of origin must be cancelled within one year of the production of the relevant energy unit.

Alternatively, in the event of an electricity purchase from renewable sources, other documents may be used as proof of conformity. This is information provided to consumers by the distributor of electricity. In this case, the applicant must calculate the total amount of energy consumed in accordance with the information provided by that document and the formula of factor B.

The European Energy Certification System (AETS)provides a framework for creating and transferring electronic documents or EECS Certificates containing standard information about the source of energy and the method of production. This standardized system is approved by the Organizations One (AIB), which is also responsible for approving Domain NameProtocols for each country. You'll find more information about AIB members and their custom protocols inthefollowing information:

As already mentioned, to calculate factor A, electricity consumption (produced or purchased on site from non-fuel RES) should be multiplied by 2.5. This conversion factor comes from Annex IV of directive 2012/27/EU: "The default coefficient of 2.5 of Member States is applied for savings in the kWh elimination. Member States apply a different coefficient with their justification." The default coefficient is based on an average conversion efficiency of 40% across Europe. 24 The most current value of this factor should be precedent.

#### C5.4 Guidance for standard value

In order to replace this criterion, the applicant will provide a copy of the fuel bills for the period included in the calculation. These values will be used for fuels contained in appendix II 5.2 tlos. In the event that other fuels (not visible at \$5.2bn), the standard values will be ESTIMATED and approved for use by the Ecomark board.

Some fuels that provide the calorific value of the fuel have bills. In this case, this value can be recommended as the standard value of the fuel to be used in the formula of factor A. Sometimes this information can also be requested to the supplier of the fuel. In any case, the applicant will have access to the energy content of the fuels contained in Annex IV of Directive 2012/27/ on energy efficiency:

Additional IV The energy content of the fuels selected for expiration — conversion tlosu.

### C5.5 Example

Company A produces laminate flooring and wants to apply to Ecomark. The company installed PV panels a few years ago, but also buys gas, gasoil and biomass every year to provide electricity, heat and steam to production lines. It has a surplus of energy that sells to the national grid.

#### 6. VOC emissions from floor coverings

#### Criteria text:

Floor coverings cannot exceed the emission values listed in Tlo 6.1 measured in a test room in accordance with the testing standard CEN/TS16516. The packaging and delivery, handling and conditioning of samples submitted for testing will follow the procedures described in CEN/TS 16516.

Tlo 6.1. Emission requirements

Products Emission requirements

compound Limit the value after 28 days stored in an ventilated test room (see

CEN/TS16516) mg/m3 inthe aird

Solid wood flooring

Multilayered wood flooring Wood-plated floor covering Total VOC minus acetic acid (CAS 64-19-7) < 0.3

Mushroom floor coverings

Bamboo floor coverings Total VOC

Laminate parkeler Total VOC < 0.16

All floor coverings Total SVOC < 0.1

Solid wood flooring

Multilayered wood flooring Wood-plated floor covering R value minus acetic acid for LCI substances (CAS 64-19-7) ≤1

Mushroom floor coverings

Bamboo floor coverings Laminate flooring R value for LCI items ≤1

All floor coverings Carcinogenic substances < 0.001

d Room testing should be performed 28 days after surface treatment. The product to be tested until this time is stored in a closed package at the place of manufacture and thus delivered to the test locatory.

For the purpose of this criterion, VOC refers to all volatile organic compounds on a gas chromatographic column, including n-hexane and n-hexadecane, which have boiling points in the range of approximately 68 °C and 287 °C, where the measurement is performed using a capillary column coated with 5% phenyl/ 95% methyl-polysysoxia.

Evaluation and verification

The applicant shall provide a declaration of conformity supported by test reports obtained from room tests conducted in accordance with CEN/TS16516 or an equivalent method of fulfilling the limits in Tlo 6.1. Test reports will include:

- The test method used;
- Test results and required calculations show the limits in Tlo 6.1.

If the room concentration limits specified in 28 days are met 3 days after the placement of the sample in the room or in another time period between 3 and 27 days after placing the sample in the room, compliance with the requirements is shortened and stopped before the test time.

Test data up to 12 months from Ecomark application will apply to products unless any changes are made to the production process or chemical formulations used.

A valid certificate from the relevant indoor climate labels is also used as proof of conformity if the indoor climate label meets the requirements of this criterion and is deemed to be equivalent by the competent authority.

For criterion 6 purposes, the VOC definition complies with CEN/TS 16516 (different from Criterion 4). Special item requirements).

Criterion 6 limits VOC's emissions from floor coverings in the context of the European Urban Air, Indoor Environment and Human Exposure Collaborative Action.

Floor coverings will comply with the limits of the compounds specified in 6.1 of the criterion, depending on the type of flooring.

#### C6.1 - Guidance to ensure compliance with criteria

The procedure for demonstrating compliance with this criterion requires a test room suitable for CEN/TS 16516 or an equivalent method.

If the room concentration limits specified in 28 days are met 3 days after the placement of the sample in the room or in another time period between 3 and 27 days after placing the sample in the room, compliance with the requirements can be notified and stopped before the test time.

### C6.2 – Guidance for assessing the equivalence of other test methods

The use of an equivalent test method will be decided by the Competent Authority in charge of the application.

If a test other than CEN/TS16516 is used while complying with criterion 6, equivalence is evaluated in terms of procedure (test method) and strictness of limit values.

- 1) Definitions and components to measure: VOCs are a mixture of components; therefore, the definition of VOCs and subgroups such as TVOC, TSVOC, R-value should be checked.
- 2) Test methods: There are several factors or parameters that should be evaluated in relation to the equivalence of test methods. These include:
- room construction and operation including room size, room air mixing, feeding and room air quality/cleaning
- selection of environmental parameters, including temperature, relative humidity, air exchange rate and product loading rate, or specific ventilation rate, air exchange rate, loading factor or air speed on the emitting surface

- 3) Collection/sampling of test materials, handling and preparation, including procedures for the collection of test material, packaging of the test material, transport and storage before opening in the lorto, preparation of test samples, conditioning of test samples before and at half-time of emission measurements, and sample position in the test chamber.
- 4) Room air sampling is the selection of factors involved in room air sampling. These include sampling locations, sampling lines and manifold, sample recovery and sampling times or duration, sample airflow rate and emission testing time.
- 5) Room performance control including temperature and relative humidity, air exchange rate, efficiency of air mixing in the test room and background concentrations.

Depending on the test conditions, it is important to realize that for limits we will be taken the different units specified in Tlo 6.1 of the 2017/176/EC Commission Decision and the units may need to be converted.

#### C6.3 – Information to be provided with the test report

Test reports will include:

- 1) The test method used;
- 2) Test results and necessary calculations showing the limits contained in Tlo 6.1 of commission decision no. 2017/176/EC.

Test reports should be prepared in great detail. In this case, this information is also used to evaluate the equivalence of test methods. It can contain a comprehensive test report (not a comprehensive list).

- 1) Test objectives: describes the purpose of the test program.
- 2) Facilities and equipment: define the test room (volume, wall material, sealing material), clean air system, air sampling location, environmental measurement and control, sample collection (including sorbents if used), analytical instrumentation (e.g. GC/MS) and standards production and calibration.
- 3) Test materials/sample descriptions: identify the material/sample tested, including the type of material/sample being tested, the size or quantity of the test sample, product history, brand name (if applicable) and the selection process of the test material. Also, if there are no samples left during the 28-day period in the test room, provide information about the preparation of the test sample, including end sealing, its position in the test room and test sample conditioning, i.e. its duration and environmental conditions.
- 4) Experimental procedures: giving details of sampling and analysis techniques and referring to published methods

- 5) Quality assurance and quality control: explains data quality goals and discusses adherence to kul criteria. Especially provide:
- results of measurements to check appropriate room operation, including a report on room sealing and excessive pressure and decay time
- results of measurements of environmental variables and measurements aimed at verifying the appropriate performance of sensors used to controlvariables, including: temperature, relative humidity, air exchange rate, air speed on the emitting surface,
- results of temperature measurements taken during the transport of the test sample from the manufacturer tot eh test locatory
- 6) Results of measurements to check room performance
- room background before placing test sample:TVOC concentration and highest individual background peak concentration. If the concentrations of compounds resulting from the analytical procedure are excluded from the results of the analysis, their names, mean concentrations that occur and related standard deviations should also be reported.
- The efficiency of air mixing reports the difference between visible and actual room volume as a percentage
- Chamber lavos provide the names and expected concentrations of test compounds and report the difference in expected and measured concentrations after the 72h test, which is expressed as a percentage of the expected concentrations for each test compound.
- 7) Data reporting: The final results of the chemical emission test are emission factors for individual compounds and total VOC emissions.

#### C6.4 – Examples of test results and evaluation of criteria

1) Evaluation and verification of test results obtained from multilayered wood flooring

In order to determine the dataprovided, it is important that the need for multilayered wood flooring determines that total VOC emissions will be less than acetic acid emissions. Also note that units do not correspond to the threshold units created in the Ecomark criteria.

### Criterion 7. Formaldehyde emissions from floor coverings and core card

#### Criteria text:

Formaldehyde-based core sheets will have one of the foils of floor covering produced using adhesives, resins or finishing agents, and if used, unprocessed core sheets produced using formaldehyde-based adhesives or resines:

- Formaldehyde emissions lower than 50% of the threshold value, which allows them to be classified as E1 from ANNEX B to EN 13986+A1 (applicable to all floor coverings and non-MDF/NON-HDF core sheets);
- formaldehyde emissions lower than 65% of E1, as defined from ANNEX B to EN 13986+A1 threshold limit applied to untreated MDF/HDF core panels;
- Formaldehyde emissions lower than limits specified in the California Air Resources Board (CARB) Phase II or Japanese F-3 star or F-4 star standards.

#### Evaluation and verification

The applicant shall declare his/her conformity to this criterion to the competent authority. The evaluation and verification of low formaldehyde emission floor coverings and core bo ards will vary depending on the certification scheme it falls into. The validation documentation required for each schema is described in 7.1

(as defined in APPENDIX B at least 13986+A1) A declaration from the manufacturer and the core board supplier, if any, In the case of EN 13986 +A1 emission limits26 or unprocessed MDF/HDF core sheets, 65% of E1 is supported by the test, as defined in annex B at least 13986+A1 emission limits, stating that the floor covering and unprocessed MDF/non-HDF core plates are compatible with 50% of E1 defined in ANNEX B en 120 is performed according to EN 717-2 or EN 717-1 or an equivalent method.

CARBOHYDRATES: Phase II limits A statement from the manufacturer and the core board supplier, if any, that are supported by test results according to ASTM E1333 or ASTM D6007 and show the basis for compliance with formaldehyde Phase II emission limits defined 9312027 the California Composite Wood Products Regulation.

The floor covering and the core plate, if any, may be labeled in accordance with Section 93120.3(e), which includes details of the manufacturer's name, product lot number or batch, and the number assigned by CARB for the third-party certificate holder (this section may include the sale of products outside of California or the no added formaldehyde or some ultra-low emitting formaldehyde based resins).

F-3 or 4-star limits Declaration of conformity to formaldehyde emission limits in accordance with JIS A 5905 (for fiber plate) or JIS A 5908:2003 from the manufacturer and the core card supplier, if any chipboard and plywood), supported by test reports according to JIS A 1460 desicator method.

#### C7.1 Guidance for identifying materials to be tested

Declarations of conformity and test reports will be provided for both the core card and the final product if expropriated.

Laminate flooring and some mushroom parquets, among other products, consist of a core sheet and other layers. If so, both the core card of the flooring and the final product must comply with criterion 7.

Regarding how to determine what type of core card is used to produce laminate flooring:

- 1) Technical name of laminate flooring: The core panel is made using different materials and different techniques, which are generally specified in the technical name of laminate parquet; e.g. DPL, HPL for techniques, HDF for core panel type, MDF:
- HDF is an acronym for High Density Fiberboard, also called hardboard, which gives high material density and is based on particularly high usage levels;
- MDF stands for Medium Density Fiberboard; It is lighter than HDF.
- DPL is short for Direct Pressure Laminate. This is a process in which the decorative wearer and the site swap are pressed into the nucleus.
- HPL stands for High Pressure Laminate. This is a process in which decorative paper and coating are first printed with special kraft papers. Gluing this high-pressure laminate to the nucleus is only in the second step.
- 2) List of components and BOMs provided in Supporting Product Evaluation and Validation
- 3) Criterion 1: Product description: Compliance with Criterion 1 requires providing a clear description to the competent authorities, technical drawing and a list of component parts and BOMs of the floor covering.
- C7.2 Descriptions of certification programs

The evaluation and verification of official emissions from floor coverings and core boarding will vary depending on the certification scheme and the type of flooring. Three certificate schemas are allowed to demonstrate compatibility:

- 1) European E1 standard,
- 2) American CARB (California Air Resources Board) phase II standard and
- 3) Japanese JIS (Japanese Industrial Standard) F-star system.

Each standard has different conditions of testing procedures that make direct numerical comparisons between thresholds impossible. However, it is clear that the E1 standard equates to significantly higher (approximately double) limits than American or Japanese requirements. Therefore, Ecomark creates "stricter" limits than E1 (that is, 50% of E1 or 65% of E1).

If compatibility is shown by the E1 European standard, the thresholds to be applied as the final product for floor covering and for the core card are as follows (E1 is the threshold value that is allowed to classify E1 as defined in Annex B of the EN 13986+A1 certification scheme):

As already mentioned, direct comparison of formaldehyde emission limits between CARB, JIS F-star and E1 systems is difficult due to the fact that each uses different test methods. However, research published in the literature in which the same products are tested by different methods and with which numerical values are associated can allow approximate comparison, as shown in figure 28 29 below.

C7.3 - Explanations about EPD schematics

All type III environmental statements contain a list of raw materials and/or components that are always used; At all stages of life cycle, it should include the specification of materials and substances that can adversely affect human health and the environment.

If the floor covering has a verified EPD, compliance with this criterion, Including in Edp you Hiza -lanmış with Requirements in criteria.

#### Criteria text:

Only requirements for the specific type of flooring must be met.

Floor coverings will be tested and classified in accordance with the latest versions of the standards and indications contained in 8.1.

a The abrasion resistance test method used will be notified and the thickness of the upper layer will be reported if approximately customized.

b Classification of wood types related to the thickness of the use classes in EN 685 and the thickness of the abrasion top swap and the wood hardness and correlations between wood types is found in CTBA Revetements internal parquet 71.01.

Floor coverings will at least achieve:

Flooring Boundaries

Cladding wood flooring

- level of use of class 23 for custom-made tiles
- the level of use of class 32 for commercial flooring.

Frika polish solid

and multilayered wooden flooring

- class 23 level of use for flooring for private use and commercial use

Frika oily, uncoated solid wood and uncoated

multilayered wood flooring

Mushroom tile floor coverings

- level of use of class 23 for custom-made tiles
- the level of use of class 32 for commercial flooring.

Mushroom floor coverings

Bamboo floor coverings

- Equilibrium Humidity Content: 8% at 20°C and 50% in rel.
- Resistance to Indentation:
- ≥ 4 kg/mm2 for flat and side pressed floor coverings
- 9.5 kg/mm2 for ≥ high density floor coverings

Laminate parking

- level of use of class 23 for custom-made tiles
- the level of use of class 32 for commercial flooring.

Evaluation and verification

The applicant shall declare compliance with the criteria to the competent authority. The declaration will be supported by test reports that include:

- tile type;
- selected test methods/s;
- test results and classification of the flooring according to the results and appropriate standard, if any.

If the floor covering has been tested according to a test method other than the above mentioned, this

test methods can be used if compared according to the opinion of the competent authority.

#### C8.1 - Explanations about wood cladding floor covering

The wood-clad floor covering, which has a thin upper crown, is produced by a thicker surface treatment swap, where other wooden flooring cannot be renewed.

At 8.1 tlos of the criteria, different test methods are listed for such tiles. Examples of appropriat test methodfor impactrecidily posture and appropriate testmethodforwear resistance refer to pren 14354 (Appendix C, D and E).

Since the wear resistance test method used is several methods, it will be reported and direct comparison should be avoided. In addition, wear resistance is the main tool used today by industry and retailers to communicate the quality of floor covering to consumers (in ac).

### C8.2 - Explanations about wood flooring

Wooden flooring (both solid and multilayered wooden flooring) is characterized, since after several years of service they allow renovation. To ensure that wooden flooring can be renewed and therefore extended service life, a suitable combination of the wood type and the thickness of the top wearer must be selected. Therefore, there are two properties that must be measured to validate this criterion.

#### Criterion 9. Compensability and extended warranty

The extended warranty will increase consumers' confidence in the purchase of Ecomark products. The extended warranty is a powerful tool to ensure and demonstrate the quality and excellent performance of a product.

#### C9.1 - Explanations regarding the repair certificate

The criterion states that simple and illustrated instructions should be given on the dismantling and replacement of damaged elements. The repair document will include two important elements:

The manufacturer of the floor covering contains such simple and illustrated instructions for removing and replacing damaged elements, making the process easier to understand to consumers. In this way, the consumer can easily decide whether to replace damaged elements on their own or if they need professional help. If so, information should be given about how to find professionals who will carry out the replacement work.

Simple illustrations refer mainly to sketches or sketches that lack details but hold mainly shapes and shapes to define the ty pe and directions of movements to be made to change elements and elements. Illustrations do not contain words, but do not include signs, arrows, etc.

2) Information on how to obtain professional repairs: If the consumer does not feel in position to carry out the change by himself, he will need the help of a professional technician. Most floor covering companies have customer service that offers the necessary services, if so, information on how to contact customer service should be included in the document. Contact information refers to the phone, email address, and even the mailing address.

If the floor covering provider does not have customer service, a description of their professional skills required to carry out the replacement work or the name of the profession in which their work will be stolen should be included. Another recommendation regarding interest should also be included.

#### C9.2 - Examples of extended product warranty

Extension of the product warranty must be free and under the same conditions as the legal one time 17. example in Clause Goal be Including in Expanded Guaranteed

#### Criterion 10. Consumer information

#### Criteria text:

The product will be sold with consumer information about the packaging or other accompanying documentation. Only claims associated with the tile type must be fulfilled.

The instructions will be legible and will be provided in the language of the country in which the product was released and/or do not contain graphical representations or symbols regarding the following points:

- Information about the subgroup to which the product belongs (solid or multilayered wood parquet, cork flooring, cork tile flooring, bamboo flooring, laminate flooring, etc.), the amount of wood, mushroom or bamboo material in the final product as a percentage of mass and if a surface treatment is still needed on the site of the user.
- Recommendations for installation:

All relevant instructions referring to the best environmental installation practices will be included:

- floating installation is recommended whenever possible. It will be referred to the necessary preparation of the under-receiving surface and the auxiliary materials needed;
- if a glued installation is recommended due to possible longer duration, therecommendation to use a Type I Ecomark certified adhesive/adhesive or a low emission adhesive suitable for EMICODE EC1 or equivalent will be included;
- Illustrated installation and disassembly instructions according to the requirements of the 9.a. criterion (if applicable).
- Recommendation for surface treatment for uncoated floor coverings and flooring that need a lubricated surface:
- relevant information about the type of coating products (e.g. oil or lacquer) needed to achieve intended durability;
- Relevant information about coating the flooring with low-spread coating products in accordance with Directive 2004/42/EC;
- information about how to extend the service life of the floor through renovations such as sanding and surface treatment.
- Recommendations for the use, cleaning and maintenance of the product:
- relevant information for routine cleaning will be included in type I Ecomark cleaning products with a promise, if appropriate to the type of floor covering;
- maintenance products and maintenance instructions, including renovation or intensive cleaning products. If possible, care products with Type I Ecomark should be recommended;
- a clear declaration of the areas of use of the flooring and declaration of conformity to the relevant EN standards for the product 8.
- Information on compensability:
- a clear statement recommending the supply of spare parts according to the requirements of criterion 9. a.;
- criterion 9.b relevant information regarding the terms and conditions of the product warranty according to the requirements.
- Information about the end of life of the product:

A detailed description of the best ways to dispose of the product (e.g. reuse, recycling, energy recovery, etc.) will be given to the consumer and sorted according to its impact on the environment.

#### **Evaluation and verification**

The applicant shall declare compliance with the criteria supported by a copy of the consumer information document to be provided with the product to the competent authority. The copy will show the suitability for each of the points listed in the criteria as appropriate.

#### **Definitions**

- Amount of wood, mushroom or bamboo material as the percentage of mass in the final product: This percentage refers to the amount of wood, mushrooms or bamboo in the final product. This value is the same as the percentage of mass of wood, mushroom, bamboo, wood-based, mushroom-based or bamboo-based material used to evaluate the criterion, but it should not be 1. In this case, the face refers to the content of wood, mushrooms or bamboo, including before being mixed with any other material, such as adhesives, to become a wood-based, mushroom-based or bamboo-based material.
- Floating installation: This works with wood, laminate, mushroom, cork tile and bamboo flooring designed on the wooden or concrete lower floor or existing flooring. Tongue and corrugated planks or tiles are mechanically locked together. Some products should also be glued together in the joints. The material usually passes over a thin foam or cork pad, which fills small imperfections on the lower floor and absorbs the sound. Installations on concrete require a thin plastic steam barrier (see Tlo 19).
- Glued installation: Engineering wood is typically glued. Other types of tiles are also pasted. Glue or existing flooring should be troweled on a clean, flat, wooden or concrete lower floor, and boards, boards or tiles should be left. No steam barrier required. Some glue flooring is the easiest to install, just peeling and pasting. The flooring should be mounted on a concrete sealer consisting of painted concrete. If any, it should be removed by sandblasting or sanding. The flooring should be installed on slippery, heavy-duty or burnt concrete. For affixed upholstery, when installing products larger than 8 cm, a recommended piece of wood glue should be applied to all end grooves before attaching to the adhesive (see Tlo 19).
- Type I Ecomark: A voluntary, multi-criteria, third-party program that issues a license that allows the use of environmental labels on products that demonstrate the overall environmental preferability of a product in a particular product category based on lifecycle considerations.
- ECOMARK EC1: ECOMARK label divides floor mounting materials, adhesives and building products into three emission classes. EC1 is practically the highest category that has proven its value as a standard for materials with very low emission rates. The materials awarded to this label meet the strictest environmental and health requirements.

- Care: Preservation and treatment of the appearance of the face either by cleaning, polishing, lubrication, waxing or by the application of specialist products.
- Coating: means any preparation, including all organic solvents or preparations containing the necessary organic solvents for proper application used to provide a film with decorative, protective or other functional effect on a surface (Directive 2004/42/EC). 34th
- Low-emitting coating products in accordance with Directive 2004/42/EC: The purpose of this Directive is to limit the total content of VOCs in certain paints and varnishes and to limit vehicle renewal products in order to prevent or reduce air pollution caused by vocs' contribution to the formation of trophospheric ozone. The directive applies to products specified in Annex I, which includes many coating products (the maximum VOC content limit values are listed in Annex II).

Consumers will be provided with all the necessary information to extend the life of Ecomark products and will be encouraged to be environmentally friendly at the end of life.

C10.1 - Example of the mass percentage content of wood, mushroom or bamboo material in the final product

The EPD of this laminate returns the following bill of materials 35. A DPL floor composition that is covered in % mass:

- 90% High Density Fiber card (HDF)
- 4% paper
- 6 % resin
- <1 % corundum

Where the HDF board consists of wood fibers and thermoset resin, especially MUF (melamine-urea-formaldehyde) resin. Information should be collected about the list of materials used for the manufacture of the HDF board.

Therefore, assuming that both pieces of information will describe the product of this example, the total amount of wood in the percentage of mass to be reported in Criterion 10:

90% (hdf's mass in the final product)  $\times$  82% (wood mass in HDF) = 74% wood in the final product

As a minimum, a single consumer information document will be provided with the product containing information in the language of the country in which the product is sold. This document should not prevent information from being provided in a single page with FC, as well as on the website. Manufacturers have the freedom to choose the best formats and languages to transmit the desired information to end users.

### C10.2 - Type I Ecomark examples

Ecomarkcovers a wide range of product groups related to the main production areas. The use of these Ecomarked products and other Type I Ecomark products should be encouraged throughout consumer information. In the following link, applicant has access to the full Ecomark Product Catalog, which is buckled under the different product categories included:

In addition, here is a list of other nationally or regionally recognized EN ISO 14024 type I Ecomarkling schemes:

### C10.3 - Examples of information requirements for flooring installation

Note that the examples provided are indicative instructions only; the applicant will provide consumer information associated with the specific type of tile.

Different flooring materials require different installation techniques. Floating floors that go down without glue or fasteners are the easiest. Loading boards or tiles is easier than pages.

### 1. Floating installation

Pad installation This works with wood, laminate, mushroom, mushroom tile and bamboo flooring designed on the wooden or concrete lower floor or existing flooring. Tongue and corrugated planks or tiles are mechanically locked together. Some products should also be glued together in the joints. The material usually passes over a thin foam or cork pad, which fills small imperfections on the lower floor and absorbs the sound. Installations on concrete require a thin plastic steam barrier.

Examples of downstairs conditions or substrate requirements

- 1. Subsysed conditions:
- the lower floor should be free of wax, paint, oil, sealing or adhesives and other debris
- the lower ground should be flat (within 5 mm at 3m) and/or (3 mm at 2m).
- check and document the moisture content of the lower floor using the appropriate moisture test
- avoid the lower floors with excessive vertical movement. Optimum performance occurs when there is very little horizontal or vertical movement of the lower floor.
- 2. Sublayer requirements
- when installing unfinished engineering flooring, seals, stains and coatings on unfinished flooring provide at least 72 hours of sticky curing time before applying.

Test the moisture content of the woodaccording to the recommendations of the stain/finish manufacturer.

- it does not staple and mechanically style products whose width exceeds 13 cm
- the floor must be mounted from several cartons at the same time to ensure a good mix of color and shade
- when possible, pre-select and set aside boards that are best blended with all horizontally mounted molds used to provide a smooth finish. Insert these boards adjacent to the molds
- be careful to stagger the ends of the boards by at least 10-15 cm in adjacent rows whenever possible. This will help to provide a more favorable overview of the floor.
- When installing uniformly designed products, start the rows with starter boards cut in various lengths. Avoid staggering rows in the same way to avoid stair steps. For the next startup boards, clipboards cut from the opposite end of the line are used
- always allow a 6 mm minim expansion around all vertical obstacles. Allow 13 mm for floating floors.

### 2. Nail or staple installation

These are the preferred methods with solid and engineered wood on a wooden lower ground. Standard, 3/4-inch thick solid wood strip and plank flooring have traditionally been nailed to the lower floor; thinner solid or engineering material is almost always stapled. Fasteners are usually rubbed diagonally by the material's tongue and on the lower ground (blind studded), so that they are invisible when the ground is finished. Solid flooring can also be nailed directly to the surface with decorative cut nails (face studded) or fastened with screws that are typically opposite mounds and concealed by wooden plugs. Installers often sandwich a 15-pound exchange of felt or rosin paper between the lower floor and floor to prevent moisture between the two and destroy the sound.

### 3. Pasted setup

Engineering wood is typically glued. Other types of tiles are also pasted. Glue or existing flooring should be troweled on a clean, flat, wooden or concrete lower floor, and boards, boards or tiles should be left. No steam barrier required. Some glue flooring is the easiest to install, just peeling and pasting.

The flooring should be mounted on a concrete sealer consisting of painted concrete. Benf should be removed by existing, sandblasting or sanding. The flooring should be installed on slippery, heavy-duty or burnt concrete.

For glued upholstery, when installing products larger than 8 cm, a recommended piece of wood glue should be applied to all end grooves before being attached to the adhesive.

### C10.4 - Examples of minimum requirements depending on flooring types example

Use of the flooring and compliance with EN standards for suitability for use The flooring has a thickness of XX mm and meets the requirements of the usage classes according to EN XXXX: XX - XX.

- indicator of room type: e.g. 1/2 bathroom, basement, bedroom, dining room, full bathroom, kitchen, laundry room, living/family room
- indicator of traffic: low, medium or high

Routine cleaning To clean dirt and debris, you just need to follow a regular sweeping or mopping routine and wipe it off as soon as they spill. When mopping, spray a parquet floor cleaner (Ecomark Type I) and mop in the direction of grain

DO NOT use: ammonia based cleaners, wax-based products, detergents, bleach, acidic materials such as varnishes, oil suns, a corrosive cleaning suns or vinegar. maintenance

Instructions To revive an old solid, apply one or more layers of Restore Finish product

Company contact information Contact Customer Service

**XXXXX** 

Customer Relations and Technical Services XXXXX, XXXXX, XXXX

Phone: +00XX-XXX-XXX

Recommendation

spare parts supply When the flooring is ordered, 5% should be added to the actual sweater images required

for cutting and rating permission (10% for cross-installations) and keep X% in case of possible repair.

Before starting finishing treatment, the flooring must be laid in place of the user for at least 72 hours.

Use of the flooring and compliance with EN standards for suitability for us Mushroom tile flooring

According to EN ISO 10874 (EN 685), the application area for flexible floor coverings is indicated by usage classes. The declared product group covers 23 and 31 usage classes. Mushroom trims

This flooring product meets the requirements of 32 usage classes for commercial use

23 for domestic use according to iso 10874 standard.

Preparation of the bottom, surface and auxiliary needed under the flooring The lower ground should be even, flat, dry, and variations should not exceed 3 mm per 2 m. All kinds of concrete, wood and ceramic surfaces should be completely dry.

Never install floating floors without using PE moisture barrier film with a minimum thickness of 0.2 mm

Cork flooring is glued or has a floating system. Learn more about

installation of the flooring product is available on the manufacturer's website.

Picture assembly/disassembly

Routine cleaning Regular cleaning with a vacuum, thin bristle broom or a damp mat with pH balanced cleaner (meeting the criteria of ecomarkled Type 1 if possible). Avoid products containing ammonia or autory. Periodically you should refresh the finish layer on the tiles. Never dip the cork floor in water and wipe them when spills occur

Right away.

Maintenance instructions Mushroom floor tiles

Mushroom tiles come predetermined and preglued with a premium water-based coating. For

the best results and protection of the seams from moisture leeches, the same varnish is applied an additional coat after the tiles are installed. Tiles should be clean and free

#### Criterion 11. Information about Ecomark

Note that the Authority will request a sample from the packaging or label/[ product page included in the product to check that these requirements are being met.

### C11.1 Instructions for the use of the Ecomark logo

Instructions for using the optional label with the text box are contained in the "User's Guide of the Ecomark logo" on the website: