The New Zealand Ecolabelling Trust

Proposed revised Licence criteria for

Furniture, Fittings and Flooring

EC-32-24

Open for comment until 08 July 2024

The New Zealand Ecolabelling Trust
48 Greys Ave
Office 503
Auckland
New Zealand

Ph: +64 9 845 3330
Email: info@eco-choice.org.nz
Website: www.eco-choice.org.nz

Specification change history

Minor clarifications, corrections or technical changes made since the specification was last reviewed and issued in XX.

Table of contents

1 Introduction

Eco Choice Aotearoa (ECA) is an environmental labelling programme which has been created to help businesses and consumers find products and services that ease the burden on the environment. The programme results from a New Zealand Government initiative and has been established to improve the quality of the environment by minimising the adverse and maximising the beneficial environmental impacts generated by the production, distribution, use and disposal of products, and the delivery of services. The programme is managed by the New Zealand Ecolabelling Trust (the Trust).

ECA operates to the ISO 14024 standard "Environmental labels and declarations – Type I environmental labelling – Principles and procedures" and the Trust is a member of the Global Ecolabelling Network (GEN) an international network of national programmes also operating to the ISO 14024 standard.

ISO 14024 requires environmental labelling specifications to include criteria that are objective, attainable and verifiable. It requires that interested parties have an opportunity to participate and have their comments considered. It also requires that environmental criteria be set, based on an evaluation of the environmental impacts during the actual product or service life cycle, to differentiate product and services on the basis of preferable environmental performance.

The life cycle approach is used to identify and understand environmental issues (adverse or beneficial impacts) across the whole life of a product or service (within a defined product or service category). This information is evaluated to identify the most significant issues and from those to identify the issues on which it is possible to differentiate environmentally preferable products or services from others available in the New Zealand market. Criteria are then set on these significant and differentiating issues. These must be set in a form and at a level that does differentiate environmentally preferable products or services, is attainable by potential ECA licence applicants and is able to be measured and verified. As a result of this approach, criteria may not be included in an ECA specification on all aspects of the life cycle of a product or service. If stages of a product or service life cycle are found not to differentiate environmentally preferable products or services, or to have insufficient data available to allow objective benchmarking in New Zealand, those stages will not generally be included in criteria in the specification. For some issues, however, (such as energy and waste) criteria may be set to require monitoring and reporting. These criteria are designed to generate information for future reviews of specifications.

The New Zealand Ecolabelling Trust Board is pleased to publish this proposed revised specification for Furniture, Fittings and Flooring. The specification has been published to take account of substances harmful to the environment, energy management and consumption of resources.

This proposed specification sets out the requirements that furniture, fittings and flooring products will be required to meet in order to be licensed to use the Environmental Choice New Zealand Label. The requirements include environmental criteria and product characteristics. The specification also defines the testing and other means to be used to demonstrate and verify conformance with the environmental criteria and product characteristics.

This proposed revised specification has been prepared based on an overview level life cycle assessment, information from specifications for similar products from other GEN-member labelling programmes, relevant information from other ECA specifications and experience from licence assessments.

Once finalised, this revised specification will be valid for a period of five years. Twelve months before the expiry date (or at an earlier date if required), the Trust will initiate a further review process for the specification.

Notes:

The Trust published its first ECA specification for furniture and fittings in 2006. The specification was reviewed and revised in 2009, 2011 and 2017 (the current version, with minor amendments in 2012, 2014 and 2019).

The Trust is now proposing another a review of EC-32 for Furniture and Fittings. This review includes the following proposed changes:

1 Broaden the scope of the product category to include mirror glass.

2 Remove the ban on weatherboard, exterior fibre cement boards used as outer cladding on buildings.

3 Permit the use of polymeric diphenylmethane diisocyanate (pMDI) resin in the manufacture of engineered wood.

4 Addition of Supplementary Module 16 for Composition Materials.

This proposed revised specification includes a number of these shaded boxes. These include notes and comments to assist readers to understand and provide comments on any new or changed requirements. Where changes to the current requirements are proposed in this specification, they are shown as either red ~~strikeout~~ (for text proposed to be deleted) or red underlined (for new text).

The Trust invites comments from interested parties.

2 Background

This section will be updated and finalised following receipt and review of submissions on this proposed draft.

The manufacture of furniture, fittings and flooring products can place a significant burden on the environment. The most important impacts on the environment are related to sourcing and processing the materials that are used to make the furniture, fittings and flooring. A wide range of materials is used. These materials have different impacts on the environment and present different opportunities to differentiate products on the basis of environmental performance.

Materials used in furniture, fittings and flooring may be sourced from natural and renewable resources, for example, wood, bamboo, and natural fibres for textiles. Harvesting of wood and bamboo can have significant impacts on forest environmental values and communities. Sourcing wood and bamboo from sustainably managed forests will help to protect these values.

Other materials furniture, fittings and flooring are sourced from non-renewable resources, for example steel, aluminium and plastic polymers from hydrocarbons. These materials are generally recyclable and supplies of post-consumer recycled materials are readily available in many cases. Encouraging reuse and recycling of non-renewal resources will help to reduce the impacts associated with extracting these resources.

Materials such as sand and minerals that are used in the production of fibre cement, mineral wool or glass wool boards, are sourced through mining or quarrying. The potential impacts of mining or quarrying operations include: dust, noise and vibration; surface water discharges with elevated pH and suspended solids; loss of amenity values; and habitats requiring rehabilitation. Ensuring that these materials are sourced through mines or quarries with established remediation plans will help to reduce the impacts of the mining operations.

Processing of the materials used in furniture, fittings and flooring can involve using hazardous substances including a wide range of preservatives, biocides, pesticides, dyes, heavy metal additives, tanning agents, degreasing and cleaning agents, blowing agents, formaldehyde, solvents, adhesives and flame retardants. Some of these substances are carcinogenic, mutagenic, toxic, ecotoxic, harmful to human reproductive systems or can contribute to global warming. Discharges of these from processing operations can have adverse impacts on the environment and people. Surface coatings or treatments are applied to many of the materials used in furniture, fittings and flooring. These can be important to provide protection, for example from corrosion, heat or fire, and help to prolong the useful life of the product. Surface coatings and treatments involve using hazardous substances, and restrictions on these will also help to reduce the adverse impacts of these processes on the environment.

Some of the hazardous substances used in manufacturing can become incorporated in the materials and can result in discharges from the finished product. These can have adverse effects on human health during use, for example, from high levels of formaldehyde emissions to air in indoor environments from some wood panels and other products, and emissions of other volatile organic compounds (VOCs).

Hazardous substances incorporated in products can also result in discharges and contaminants when products are disposed to landfill or by incineration. Restricting the use of these hazardous substances will help to reduce the adverse impacts of furniture and fitting products on the environment.

The manufacturing of cement, which is used in fibre cement boards, uses significant quantities of energy and is a significant industrial source of carbon dioxide emissions. Criteria aimed at reducing these impacts help to reduce the impact that cement has in the lifecycle of a board product.

Because the most significant adverse impacts in the life cycle of furniture, fittings and flooring result from sourcing and producing the raw materials (including the associated use of hazardous substances), encouraging features that ensure products are durable and have a long life, will help to reduce the overall burden of these products on the environment. Encouraging features that allow for reuse and recycling will also prolong the effective life of the raw materials used in manufacturing. Requirements for product quality (including guarantees) and regarding ease of maintenance (in particular cleaning) and repair will help to prolong the life of the product. Requirements to encourage or enable recycling include those on ease of disassembly and labelling of plastic parts.

Based on a review of currently available information, the following product category requirements will produce environmental benefits by encouraging more sustainable production of raw materials, reducing the use of hazardous substances and their associated discharges, and prolonging the useful life of the products and their component parts. As information and technology change, product category requirements will be reviewed, updated and possibly amended.

3 Interpretation

AS/NZS means Australian/New Zealand Standard.

Blowing agent means a substance (gas, liquid) that is able to produce cells in the plastic structure of a foam. This process can vary according to the property of the substance, e.g. a liquid may develop cells when changing into gas and a gas may expand when pressure is released[1].

CFCs means Chlorofluorocarbons.

CITES means the Convention on International Trade in Endangered Species.

Composite materials means material engineered from natural minerals i.e. stone, acrylic and resin.

Energy Management Programme means a programme to achieve and sustain efficient and effective use of energy including policies, practices, planning activities, responsibilities and resources that affect the organisation's performance for achieving the objectives and targets of the Energy Policy.

Engineered wood products are composites of wood and resin. Examples are medium density fibreboard (MDF), particleboard and plywood.

GEN means Global Ecolabelling Network.

Global Warming Potential (GWP) is a measure of how much a gas is estimated to contribute to global warming. It is a relative scale that compares the contribution of the gas to that of the same mass of carbon dioxide (CO2), which has a GWP of 1, over a defined time frame. E.g. methane has a GWP of 21 (100-year time frame). This means that, over 100 years, methane will be approximately 21 times more heat-absorptive than CO_2 per unit of weight[1].

HCFCs means hydrochlorofluorocarbons.

HFCs means hydrofluorocarbons.

ISO means International Organisation for Standardisation.

Label means the Eco Choice Aotearoa Label.

Manufacturing adhesive means adhesives used to different materials in the product to one another, e.g. gluing foam to wooden or plastic chairs; gluing laminates to boards; or gluing wooden parts to each other.

Ozone Depleting Potential (ODP) is a relative value that indicates the potential of a substance to destroy ozone gas (and thereby damage the Earth's ozone layer) as compared with the impact of a similar mass of chlorofluorocarbon-11 (CFC-11). CFC-11 is assigned a reference value of 1. E.g. a substance with an ODP of 2 is twice as harmful to the ozone layer as CFC-11[1].

Packaging means material used to wrap or protect products. It does not include strapping or labels.

[1] Published by the German Technical Corporation – Programme Proklima and commissioned by the German Federal Ministry for Economic Cooperation and Development

Preservatives means biocides, fungicide or insecticide.

Recycled ~~Wood~~ material includes:

> **Post-Consumer:** Material generated by households, or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.
>
> **Pre-Consumer:** Material diverted from the waste stream during a manufacturing process. Excluded is re-utilisation of materials generated in a process and capable of being reclaimed within the same process that generated it.

Safety Data Sheet (SDS) means a document that describes the properties and uses of a substance, that is, identity, chemical and physical properties, health hazard information, precautions for use and safe handling information in accordance with the New Zealand Chemical Industry Council – Preparation of Safety Data Sheets Code of Practice.

Shall not be added means deliberate additions to a product or its components. This can be verified by declarations and examination of the input material documentation (SDS for steel, nylon or dyes for example).

Shall not be used during the production processes means not used for processes which do not add substance to the final product (for example degreasing, bleaching). This can be verified by declarations and SDS of substances used in production processes.

Waste Management Programme means a programme to achieve and sustain efficient and effective minimisation and disposal of waste including policies, practices, planning activities, responsibilities and resources that affect the organisation's performance for achieving the objectives and targets of the Waste Policy.

Notes and questions:

A new definition has been added to reflect the inclusion of composite materials in Supplementary Module 16.

Q1. Do you agree with the proposed definition of composite materials in this section? If not, please explain why not.

4 Category definition

This category includes:

- indoor and outdoor furniture, including for example chairs, desks, tables, cabinets, book shelves, beds and wardrobes;
- fittings including for example partitions, window frames, doors, wall furniture, skirting strips and shelves;
- panels to be used for making furniture or fittings;
- indoor lining products intended for use on walls and ceilings, and may be in board, panel, sheet or tile form, and may or may not have acoustic insulation properties;
- indoor flooring that is fixed to the floor and laid on top of an underlying foundation of concrete or wood/beams;
- composite materials covered in supplementary module 16 of EC-32;
- outer cladding comprising materials covered in the supplementary modules of EC-32;
- mirror glass.

The criteria do not cover:

- weatherboard, exterior fibre cement board or other materials intended for use as outer cladding on buildings;
- ceramic tiles, ~~stone~~, marble or granite;
- linings primarily used to insulate against heat loss (covered by EC-25 Thermal Building Insulants);
- flooring applied in a liquid state;
- integrated heating and flooring systems; and
- carpets and rugs (covered by EC-63 Carpets and Rugs ~~EC-04 Wool and wool-rich pile carpets, or EC-33 Synthetic Carpets~~).

To be licensed to use the Label, the furniture, fitting or flooring product must meet all of the environmental criteria set out in clause 5 and product characteristics set out in clause 6.

Notes and questions:

The Trust is proposing to broaden the scope of EC-32 because when the specification was prepared in May 2017 weatherboard and exterior fibre cement board intended for use as outer cladding on buildings were excluded from the category definition because the specification was focussed on internal products. The NZET has now decided to consider inclusion of such products given that outdoor furniture manufactured with materials covered in the supplementary modules of EC-32 is permitted.

Mirror glass was excluded from Supplementary Module 6 as there was concern in the difficulty to recycle it and due to the use of hazardous substances (historically mirror was manufactured with heavy metals, for the back coating, which we understand is no longer the case). In this proposed revised specification, mirror has to meet the requirements in Clause 5.4 (Hazardous substances), product stewardship requirements in Clause 5.9, and other requirements for glass in Supplementary Module 6.

Given the rise in use of polymeric diphenylmethane diisocyanate (pMDI) resin in the manufacture of engineered wood, NZET considers it should be allowed (as formaldehyde is currently allowed and has similar impacts to pMDI). Requirements for pMDI have been included in Clause 5.4 Hazardous substances.

A new supplementary module (Composite Materials) is proposed due to market interest in licensing products which include these materials that are not currently addressed in other supplementary modules.

Q2. Do you agree with the proposal to broaden the scope of EC-32? If not, please explain why not.

5 Environmental criteria

5.1 Legal requirements

Criteria

~~a~~ The applicant / licence holder must demonstrate how applicable environmental legal requirements are met, including that all necessary environmental consents and permits are in place.

~~b The product must comply with the provisions of all relevant environmental laws and regulations that are applicable during the product's life cycle.~~

c Significant component manufacturing or processes involved in the production of a furniture, fitting or flooring product may not be under the direct control of a licence applicant/holder. Where this is the case, the licence applicant/holder must have and implement a formal supplier regulatory compliance management/assurance programme that:

- Includes documented requirements for suppliers to provide components or services compliant with applicable environmental regulatory requirements (for example in supply contract conditions);
- Identifies suppliers, materials or processes that involve, or would be expected to be subject to a high level of regulatory control and/or which present a risk of regulatory non-compliance; and
- Includes appropriate requirements for suppliers to provide assurance to the applicant / licence holder on the supplier's environmental regulatory compliance.

Verification required

Conformance with this requirement shall be demonstrated by providing a written statement on regulatory compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. **This statement shall be supported by documentation identifying the applicable regulatory requirements and demonstrating how compliance is monitored and maintained.** In cases where there is a high potential risk associated with environmental regulatory compliance and limited assurance provided by the licence applicant/holder's supplier regulatory compliance management programme, The Trust's assessor may require an on-site inspection at the relevant supplier's premises.

Explanatory notes

Relevant laws and regulations could, for example, include those that relate to:

- Producing, sourcing, transporting, handling and storing raw materials and components for manufacture;
- Manufacturing processes;
- Handling, transporting and disposing of waste products arising from manufacturing;
- Transporting product within and between countries; and
- Using and disposing of the product.

The documentation required may include, as appropriate:

- Procedures for approving and monitoring suppliers and supplies; and
- Information provided to customers and contractors regarding regulatory requirements.

Assurance and/or information that licence applicants/holder may require from their suppliers could include:

- Evidence of a formal certified environmental management system (for example an ISO 14001 certificate) and supporting records on regulatory compliance (for example, copies of regulatory requirements registers, procedures to manage regulatory compliance, monitoring and evaluation reports on regulatory compliance, internal or external audits covering regulatory compliance and management review records covering regulatory compliance);
- Copies of published environmental, sustainability and/or annual reports expressly addressing environmental regulatory compliance (for example verified environmental statements prepared under the European EMAS regulations);
- Audit reports completed by independent and competent auditors addressing regulatory compliance (for example, reports for other eco-label licences or reports from regulator audits); and
- Participation by the supplier in the licence applicants/holders own supplier audit programme.

It is not intended to require licence holders to accept increased legal responsibility or liability for actions that are outside their control. The Trust's intention is to ensure any potential for environmental regulatory non-compliance associated with an ECA labelled product is managed to a level that minimises risk of reputation damage to the ECA label and programme.

Notes:

The Trust has updated the wording to bring this specification in line with other, recently revised, ECA specifications.

5.2 Modern slavery and social accountability

Criteria

a The applicant / licence holder and manufacturer must have a policy / policies on human rights, diversity & inclusion, and anti-bullying. At a minimum, it should comprise:

- An explicit commitment to respect all internationally recognized human rights standards – understood, at a minimum, as the International Bill of Rights and the International Labour Organization (ILO) Declaration on the Fundamental Principles (see below) and Rights at Work;
- Stipulations concerning the company's expectations of personnel, business partners and other relevant parties e.g. a code of conduct; and

- Information on how the company will implement its commitment and monitor compliance with it.

b Where an applicant / licence holder and manufacturer has found instances of modern slavery in their business operations and or supply chains in the past two years, there shall be evidence of corrective action.

c In addition to the above, the applicant / licence holder and manufacturer shall consider:

- Providing information to confirm whether the requirements of Social Accountability International Standard, SA8000 have been considered;
- Being a Living Wage employer (or equivalent); and
- Having a senior member of its organisation responsible for social and environmental sustainability.

Note: From ILO Declaration on the Fundamental Principles and Rights at Work, there are the following core labour standards:

- Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87);
- Right to Organise and Collective Bargaining Convention, 1949 (No. 98);
- Forced Labour Convention, 1930 (No. 29);
- Abolition of Forced Labour Convention, 1957 (No. 105);
- Minimum Age Convention, 1973 (No. 138);
- Worst Forms of Child Labour Convention, 1999 (No. 182);
- Equal Remuneration Convention, 1951 (No. 100); and
- Discrimination (Employment and Occupation) Convention, 1958 (No. 111).

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant/licence holder. This statement shall be accompanied by documentation that:

- Copies of the relevant policies, procedures and plans; and
- Records demonstrating the plans are being effectively implemented (including monitoring results).

Notes:

The Trust has introduced this clause to bring this specification in line with other, recently revised, ECA specifications.

5.3 Raw materials

Criteria

The product must comprise at least 90% by weight of one or more of the materials covered in the supplementary modules to this specification. No other single material shall comprise more than 5% weight.

Verification required

Licence applicants must provide the following information to The Trust at the time of making an application. Licence holders must maintain and update this information and advise The Trust about any changes to this information.

- a product description including a list of components, their suppliers, material type and % by weight of the finished product (see Table 1 in Appendix A);
- component and process supplier information (see Table 2 in Appendix A); and
- substances and hazardous materials used in the production of the product (see Table 3 in Appendix A).

NOTES:

1 Completed tables of information will be attached to and form part of the Applicant's Statement on Compliance required to be signed by applicants during the licence assessment and confirmed by licence holders during licence supervision assessments.

2 Changes to information, in particular to products and suppliers, will require assessment before they can be confirmed on an ECA licence.

5.4 Hazardous substances

5.4.1 General hazardous substances

These criteria apply to all materials in the product and all related processes used by the licence applicant/holder, their component suppliers and sub-contractors, unless otherwise specified.

The following are exempt from clause 5.3.1:

- Small parts such as screws, hinges, locks, bolts etc. unless they are parts that are intended to come in frequent contact with skin;
- Trace levels (< 0.1 % by weight) of substances reported in Safety Data Sheets to be potentially present as contaminants or impurities in raw materials or component substances; and
- Recycled content that may have been treated or produced with the prohibited substances during its previous lifecycle.

Criteria

a The following substances shall not be added to the product or used during the production processes:

- Arsenic;
- Cadmium;
- Chromium VI compounds;
- Copper;
- Lead; and

- Mercury

Pigments, additives, catalysts and stabilisers are included in these requirements.

The following are exempt from this clause:

Small parts	Small parts such as keys, which are intended to come into frequent contact with skin, may be made from free-machining brass containing lead but must be designed to minimise skin contact.
PVC	PVC is specifically controlled by requirements in Supplementary Module 4. NOTE: The Trust intends to monitor information on PVC obtained from Supplementary Module 4 and may in future remove this exemption for PVC.
Copper	Copper can be included in a metal alloy, or in electrical components (if included in a product).
Outdoor furniture	Furniture that is permanently stored and used outdoors.
Fibre cement and gypsum	Fibre cement and gypsum-based boards are exempt from these requirements but must meet the limits for heavy metals in Supplementary Modules 8 and 11, respectively.
Lead-based paint	Lead-based paint used in metal coatings for mirrors is permitted provided it does not contain more than 0.2% by weight of lead. Please refer to Supplementary Module 6.

b No substances shall be added to products or used during the production processes that are classified as carcinogenic, harmful to the reproductive system or genetically harmful. See Appendix B, Table 4 for relevant classifications.

The following are exempt from this clause:

Wood dust	Wood dust which is physically and chemically bound in the product
Formaldehyde	Uses of formaldehyde (including Urea Formaldehyde resins) which are specifically controlled by requirements in Supplementary Modules 1, 2, 9, 12 and 13.
Methanol	Residual methanol present as a contaminant in raw materials used in engineered wood product; and Surface pre-treatment chemicals containing up to 2 % methanol used for metal parts that require high scratch, wear or corrosion resistance.
Preservatives for solid wood	Arsenic, Chromium and Boron-compounds, aziridine and polyaziridines used in solid wood products that are permanently stored and used outdoors.
Borax/Boron	Used in glass wool fibre, which is specifically controlled by requirements in Supplementary Module 12.

1,3 butadiene, N-nitrosamines, styrene	1,3 butadiene, N-nitrosamines or styrene in padding materials or rubber. See Supplementary Modules 7 and 14 for further specific restrictions.
VCM and EDC	Vinyl Chloride Monomer (VCM) and Ethylene Dichloride (EDC) in the production of PVC, which is addressed in Supplementary Module 4.
Crystalline silica	Crystalline silica in Fibre Cement Boards and Composite Materials, which is addressed in Supplementary Modules 8 and 16.
Polymeric diphenylmethane diisocyanate (pMDI)	Use of pMDI resin in the manufacture of engineered wood which is specifically controlled by requirements in Supplementary Module 2.

NOTES:

Under current HSNO, GHS classifications or EU Risk phrases, this clause will preclude the use of certain phthalates including DEHP and DBP, certain aziridine compounds, certain powder coating preparatory treatments and certain plastics.

c Wall lining products, flooring, chairs, tables, drawers, and any furniture and fittings products where regular human contact is likely, must not be manufactured from more than 0.1 % by weight (in total) of substances that are classified as acutely toxic, skin irritants or respiratory or contact sensitisers. See Appendix B, Table 4 for relevant classifications.

The following are exempt from this clause:

Substances that change properties	Substances or materials which change their properties through processing and thus become no longer bioavailable (i.e. physically and chemically bound in the product), or undergo chemical modification in a way that removes the previously identified hazard, e.g. polyurethane binders and gum rosins. For substances that are used in accordance with this exemption, Licence holders will be asked at supervision assessments to comment on the development and availability of environmentally preferable alternatives.
Formaldehyde	Uses of formaldehyde (including Urea Formaldehyde resins) which are specifically controlled by requirements in Supplementary Modules 1, 2, 9, 12 and 13.
Polymeric diphenylmethane diisocyanate (pMDI)	Use of pMDI resin in the manufacture of engineered wood which is specifically controlled by requirements in Supplementary Module 2.

d Halogenated organic substances or solvents, including methylene chloride, binding agents and flame retardants, shall not be added to products or used during the production processes.

The following are exempt from this clause:

Outdoor furniture	Furniture that is permanently stored and used outdoors
Blowing agents	Foam blowing agents (which are specifically controlled by requirements in Supplementary Module 7).

OR

Manufacturers of ceiling tiles who use halogenated organic binding agents must implement a programme to phase out the use of these substances and report annually to the Trust on the progress of the programme.

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. The statement shall be supported by documentation that:

- identifies hazardous substances used in materials and production processes (including CAS numbers and Safety Data Sheets, where available);
- identifies the classifications that apply to these substances, confirming all meet criteria 5.3.1;
- where a pre-treatment chemical is being used under the exemption for metal parts requiring high scratch, wear or corrosion resistance, the applicant/licence holder, must provide evidence of:
  - the need for this performance on the parts concerned;
  - an ongoing programme to work with chemical suppliers to identify and, when available, use pre-treatment chemicals that will meet the requirements of Clause 5.3.1 b;
  - includes information (which may include supplier declarations and supporting evidence) demonstrating no banned substance in 5.3.1 d) are added or used; and
  - includes relevant test reports.

Notes and Questions:

This text has been added to reflect the proposed change to permit the use of pMDI and an exemption for lead-based paint used in metal coatings for mirror glass.

Polymeric diphenylmethane diisocyanate (pMDI)

Due to its carcinogenic properties, the presence of formaldehyde in resins and other industrial products has been a subject of great concern in past years and is well documented by the World Health Organization (1989a and 1996), the US Environmental Protection Agency (1998a), and the California Air Resources Board (2007)[2].

As such, the furniture market is seeking to develop formaldehyde-free wood-based panels. Among the newer resins for wood-based panels, polymeric 4,4-

[2] https://ww2.arb.ca.gov/our-work/programs/composite-wood-products-program/about

diphenylmethane diisocyanate (pMDI) is a formaldehyde-free alternative. However, as with formaldehyde, pMDI is a hazardous material. According to the NZ Environmental Protection Agency, pMDI is classified as H334: may cause allergy or asthma symptoms or breathing difficulties if inhaled, H317: may cause an allergic skin reaction, H351: suspected of causing cancer and H373: may cause damage to organs through prolonged or repeated exposure[3].. Under WorkSafe NZ requirements, employers have duties to protect the safety and health of employees from exposure to hazardous substances, including isocyanates. WorkSafe has produced a guidance document on how to use isocyanates safely [4]. The Approved Code of Practice for the Safe Use of Isocyanates (dated March 1994), which refers to the use of isocyanates in the production of polyurethane materials, covers the safe storage, transport, use, and disposal of isocyanates. WorkSafe has also developed the Workplace Exposure Standards (WES)[5], which are guidance values, for 4,4-methylene diphenyl diisocyanate (CAS 101-68-8). The WES are state:

- the average airborne concentration calculated over an 8-hour working day is 0.02 mg/m^3 and
- the short term exposure limit (15-minute time weighted average exposure standard) is 0.07 mg/m^3.

The Nordic Ecolabelling for Furniture and Fitments[6] (031, version 5.8, 04/12/2020 – 31/12/2025) permits the use of methylene diphenyl diisocyanate, MDI* resin in the production of polyurethane foam. The specification requires that the Workplace Exposure Limits for air concentrations of MDI (CAS No. 101-68-8) in areas where employees are working without protective equipment, must not exceed 0.005 ppm or 0.05 mg/m^3 (an average over an 8-hour period). There is also a requirement for: *A description of the safety measures taken and the statutory Workplace Exposure Limits for isocyanates in the country of manufacture. If the statutory limits are the same or more stringent than the threshold limit values in the requirement, no further documentation is required. If the statutory limits are less stringent, a description of how air concentration levels of isocyanates are measured must be submitted, along with a test report showing compliance with the threshold limit values specified in the requirement.*

As discussed in the background document to that specification, MDI is recognised as the least harmful isocyanate compound[7]. The Trust is now proposing to add in an exemption to permit the use of pMDI resin in the manufacture of engineered wood in this revised EC-32 specification provided it meets the requirements in Supplementary Module 2.

*please note: MDI which is the generic name of a product used in industrial settings, pMDI is the primary technical/commercial form of MDI.

Lead-based paint

[3] https://www.epa.govt.nz/database-search/chemical-classification-and-information-database-ccid/view/DC0D43F4-0557-425B-827F-793A6FF9109F
[4] https://www.worksafe.govt.nz/topic-and-industry/hazardous-substances/guidance/substances/safe-use-of-isocyanates/
[5] Methylene bisphenyl isocyanate, as -NCO | WorkSafe
[6] https://www.nordic-swan-ecolabel.org/criteria/furniture-and-fitments-031/
[7] Windows and exterior doors – background to ecolabelling, Nordic Swan Ecolabel, 29 November 2022

Historically, lead-based paints were used to protect the silver in mirrors from corrosion. A review of the Nordic Ecolabelling specification for Furniture and Fitments[8] (031, version 5.8, 04/12/2020 – 31/12/2025) states mirror glass must not have a metal coating that contains copper and any lead-based paint used in a metal coatings for mirrors must not contain more than 0.2% by weight of lead. The Trust is considering adding an exemption for lead-based paints in line with the Nordic Swan Ecolabelling requirements.

Notes and questions:

Q3. Do you agree with the proposed change to permit the use of pMDI resin in the manufacture of engineered wood?

Q4. Do you agree with the proposed exemption for lead-based paint used in metal coatings of mirror glass?

Q5. Do you know of any other changes, additions or exemptions to this Clause that should be made due to allowing mirror glass, composites and pMDI in the scope of EC-32?

5.4.2 Radioactivity

Criteria

Products containing greater than 75% by mass of granites, pegmatites, brick, clinker, slag or other wastes from smelting, or ash from coal or peat, must comply with the following:

i $CK/3000 + CRa/300 + CTh/200 < 1.0$

AND

ii $CRa/100 < 1.0$

Where:

- CK = Concentration of Potassium-40 (Bq/Kg);
- CRa = Concentration of Radium-226 (Bq/Kg); and
- CTh = Concentration of Thorium-232 (Bq/Kg).

NOTES:

- 1 % Potassium is equivalent to 310 Bq/Kg of Potassium-40
- 1 ppm Uranium is equivalent to 12.3 Bq/Kg of Radium-226
- 1 ppm Thorium is equivalent to 4.0 Bq/Kg of Thorium-232

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported with documentation showing compliance with the above limits and including details of the test method used.

Test Method

[8] https://www.nordic-swan-ecolabel.org/criteria/furniture-and-fitments-031/

The analysis should be performed by gamma spectrometry of crushed materials, gamma spectrometry using a portable gamma spectrometer, strong acid digest ICP-AAS or ICP-MS technique, or similar test method.

5.5 Manufacturing adhesives

Manufacturing adhesive means an adhesive used to glue different materials in the product to one another, e.g. gluing foam to wooden or plastic chairs; gluing laminates to boards; or gluing wooden parts to each other.

These criteria do not apply to binders used in engineered wood products, which are addressed in Supplementary Module 2.

Criteria

a No adhesives that are classified toxic shall be used in the product.

b If there is more than 50 g (wet adhesive) in the finished product, the adhesive must not be classified ecotoxic.

c The adhesives may contain a maximum of 5 % organic compounds with boiling point < 250 °C.

d The adhesive must not be formulated with alklyphenolethoxylates, alkylphenols or halogenated solvents.

e The content of free formaldehyde in adhesives used in the product shall not exceed 0.5 % by weight of the adhesive.

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. The statement shall be supported by documentation that:

- identifies the adhesive products used (including CAS No. where available);
- includes Safety Data Sheets for the adhesives;
- identifies classifications that apply to each adhesive;
- demonstrates that thresholds for groups or individual hazardous substances are not exceeded in each adhesive product; and
- includes composition data and calculations for formaldehyde in adhesives.

Compliance with the requirements in a) and b) may be demonstrated by providing data indicating that the adhesive does not have any of the classifications (or combinations thereof) listed in Table 4 (Appendix B) for toxins and ecotoxins.

5.6 Energy management and embodied carbon

Criteria

a The furniture, fitting, or flooring applicant / licence holder must have effective energy management policies and procedures and / or an energy management programme.

b The furniture, fitting, or flooring manufacturer **and** applicant / licence holder must have improvement objectives and targets for reduction of energy use related to production of ECA-licensed products, and associated greenhouse gas emissions,

over time. Furthermore, ECA licence holders must publicly disclose a commitment to decarbonise between now and 2050 on a 1.5°C trajectory, with a significant reduction prior to 2030. Any divergence from objectives or targets should be explained in the annual report.

c The licence holder must report annually to ECA on energy use and management including:

- total energy use;
- breakdown of total energy use to types of energy used, including energy from renewable sources;
- energy use related to production (i.e. the embodied energy of a product);
- energy used during transport of raw materials (if the licence holder is the manufacturer), or transport of furniture, fitting, or flooring products that are imported from overseas manufacturers (if the licence holder is an importer/supplier);
- initiatives taken to reduce energy use and improve energy efficiency;
- initiatives taken to calculate and reduce greenhouse gas emissions associated with energy use; and
- initiatives or requirements for suppliers or contract manufacturers.

The annual report shall also include information on energy management during production and/or whole of life energy use, where that information is available from the contract manufacturer or supplier.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by relevant documentation that:

- describes the energy management policies, procedures and programmes;
- improvement objectives and targets for reduction of energy use related to production of ECA-licensed products;
- confirms the licence holder has publicly committed to decarbonise between now and 2050 on a 1.5°C trajectory, with a significant reduction prior to 2030 (any divergence from objectives or targets should be explained in the annual report) and
- includes annual reports to ECA on energy use and management.

Notes:

The Trust has updated the wording in this specification to bring it in line with other, recently revised, ECA specifications.

5.7 Waste management

Criteria

a The furniture, fitting, or flooring applicant / licence holder, must have effective waste management policies and procedures and/or a waste management programme.

b Licence holders must report annually to ECA on waste management including:

- quantities and types of waste recovered for reuse internally and externally;
- quantities and types of waste recycled internally and externally;
- quantities and types of waste disposed of to landfill;
- quantities and types of waste burned internally for energy recovery;
- waste generation related to production;

initiatives taken to reduce waste generation and improve recovery/recycling of waste; and initiatives or requirements for suppliers or contract manufacturers.

c Licence holders must have continuous improvement objectives and targets relating to the reduction of waste generation, and the increase of reuse and recycling rates over time. Any divergence from objectives or targets should be explained in the annual report.

The annual report shall also include information on waste management during production and/or whole of life waste generation and management, where that information is available from the contract manufacturer or supplier.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that:

- describes the waste management policies, procedures and programmes;
- includes annual reports to ECA on waste generation and management; and
- details the improvement objectives and targets relating to the reduction of waste generation and the increase of reuse and recycling rates (any divergence from objectives or targets should be explained in the annual report).

Notes:

The Trust has updated the wording in this specification to bring it in line with other, recently revised, ECA specifications.

5.8 Packaging requirements

Criteria

a Primary plastic packaging must be made of plastics that are able to be recycled in the country where the product is sold.

b Primary packaging must not be impregnated, labelled, coated or otherwise treated in a manner, which would prevent or significantly limit recycling (e.g. metallic labels).

c If PVC primary packaging is used: Information shall be provided to The Trust at application and thereafter reported annually on PVC and/or phthalates used in the packaging. This should include information from production records and/or suppliers on:

i the percentages by weight of recycled and virgin PVC;

ii the particular production processes (membrane cells, non-asbestos diaphragms, modified diaphragms, graphite anodes, mercury cells, closed-lid production etc.) used to produce chlorine and VCM for the PVC being used in the packaging for ECA-licensed products (including the locations of the production);

iii information, where available, on waste disposal, wastewater treatment and emissions to air (occupational exposure, emissions from the factory and emissions from the final PVC resin);

iv information on any Environmental Management System (EMS) for the production process, including requirements for waste, water, air and product-related requirements;

v the types of stabilisers used;

vi the types and amounts of any phthalate plasticisers present in recycled content of the PVC (if that information is available) and/or added when manufacturing PVC;

vii research and initiatives implemented on substitutes for phthalates identified as of concern by regulators; and

viii any product stewardship arrangements for the packaging.

Note: Regulators have identified the following phthalates to be of concern – dibutyl phthalate (DBP), diisobutyl phthalate (DIBP), butyl benzyl phthalate (BBP), di-n-pentyl phthalate (DnPP), di(2-ethlyhexyl) phthalate (DEHP), di-n-octyl phthalate (DnOP), diisononyl phthalate (DINP) and diisodecyl phthalate (DIDP). These phthalates may be prohibited by the Hazardous Substances criteria in clause 5.3.

d Primary cardboard packaging shall consist of any combination of:

– Packaging licensed under EC-10

OR

– recycled content

AND/OR

– virgin fibre from native forests, provided the forests are covered by a current Sustainable Forest Management (SFM) certification

AND/OR

– waste wood, or virgin fibre from plantations (including from farm forests or wood lots), provided the sources are legally harvested.

Please see the notes section below for details of accepted evidence of legal harvesting and SFM certifications.

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company/Licence holder. This statement shall be supported with the following documentation and evidence:

- Conformance with criteria (a) shall be supported by documentation verifying the packaging is recyclable.
- Conformance with criteria (b) shall be demonstrated by providing samples of all plastic containers and components.
- Conformance with criteria (c) shall be demonstrated by providing initial and ongoing annual reports to The Trust on PVC and plasticisers used. This should include as much of the available information requested in (c) as possible.
- Conformance with criteria (d) shall be supported by documentation from the packaging manufacturer verifying the recycled content of the cardboard packaging or verifying the source of all virgin fibre in the cardboard packaging.

Notes for 5.7 d)

This Clause requires details of forest management certifications, chain-of-custody certifications, and physical controls for SFM certified wood through the supply chain from the forest to the manufacturer. It does not require that the finished product carry a FSC or PEFC (or equivalent) label, nor does it require any information about FSC or PEFC credits generated in the supply chain or assigned to the finished products.

Legal harvesting – for fibre from plantations, and waste wood from all virgin fibre sources:

The following will be accepted as sources of information to demonstrate legal harvesting, where chain of custody evidence is available for virgin fibre sources:

- Forest Stewardship Council – "Certified" or "Controlled Wood" (www.fsc.org).
- Programme for the Endorsement of Forest Certification (PEFC) - "Certified" or "Controlled Sources" (www.pefc.org).
- SGS Timber Legality & Traceability Verifications service (TLTV) Verification of Legal Compliance certification (TVTL-VLC) (http://www.sgs.com/en/Public-Sector/Monitoring-Services/Timber-Traceability-and-Legality.aspx).
- Rainforest Alliance SmartWood Verification of Legal Compliance (VLC) certification (http://www.rainforest-alliance.org/forestry/verification/legal).
- System Verifikasi Legalitas Kayu - Timber Legality Verification System (SVLK) certified, or SVLK/PHPL (Pengelolaan Hutan Produksi Lestari – Sustainable Production Forest Management) certified (http://liu.dephut.go.id/).
- Sustainable Forest Management Plans (supported with Annual Logging Plans) that have been prepared and approved under the New Zealand Forests Act 1949 (amended in 1993).
- Evidence of legal harvesting from the Global Forest Registry (www.globalforestregister.org)

Sustainable Forest Management (SFM) – for fibre from native forests:

The FSC and PEFC certification schemes each have a range of certificates/labels. Some of these allow for wood/fibre from certified sustainably managed plantations or forests to be mixed with non-certified wood/fibre. Under FSC Mixed Credit or PEFC Volume Credit methods, wood/fibre or products associated with the certification claim or label may or may not actually contain wood/fibre from the certified sustainably managed source. Certifications for fibre from native sources accepted by The Trust are those which will ensure that fibre from sustainably managed native forests will be actually present in the final packaging used for ECA-licensed products. These are set out below.

Types of FSC claims[9] on invoices or packing slips which can be used to demonstrate compliance with the SFM requirements:

- FSC 100 %; and
- FSC Mix Credit – only if the manufacturer can demonstrate that fibre from SFM is actually present in the ECA products.

FSC Controlled Wood does not demonstrate SFM.

Types of PEFC claims[10] which can be used to demonstrate compliance with the SFM requirements:

- PEFC Certified – Physical Separation method; and
- X % PEFC Certified – Volume Credit method – only if the manufacturer can demonstrate that fibre from SFM is actually present in the ECA products.

PEFC Controlled Sources does not demonstrate SFM.

The following certification schemes will be accepted as equivalent to FSC or PEFC certification of SFM:

- Pengelolaan Hutan Produksi Lestari – Sustainable Production Forest Management certified (PHPL) (http://liu.dephut.go.id/); and
- Sustainable Forest Management Plans, supported with Annual Logging Plans, that have been prepared and approved under the New Zealand Forests Act 1949 (amended in 1993). These Plans must be prepared in accordance with Standards and Guidelines for the Sustainable Management of Indigenous Forests[11] and guidance for preparing Sustainable Management Plans and Annual Logging Plans[12]. Wood sourced from New Zealand indigenous forests covered by approved plans will be accepted as equivalent to FSC sustainably managed forest certification provided compliance with the approved plans is demonstrated through independent on-site assessment.

For any other schemes to be considered, the applicant will be required to provide detailed information that demonstrates the certification scheme is credible and equivalent.

---

[9] *FSC Chain of Custody Certification – factsheet.* FSC UK, 14 January 2013.
[10] *PEFC Chain of Custody Certifications – The Key to Selling Certified Products.* PEFC, 2012.
[11] *Standards and Guidelines for the Sustainable Management of Indigenous Forests*, Fourth Edition. Ministry of Agriculture and Forestry 2009 (or any more recent edition applicable at the time of application for an ECA licence).
[12] *Indigenous Forestry Sustainable Management: A Guide to Preparing Draft Sustainable Forest Management Plans, Sustainable Forest Management Permit Applications and Annual Logging Plans.* Sustainable Programmes, Ministry of Agriculture and Forestry Policy 2009.

5.9 Consumer information

Criteria

Information shall be provided to purchasers and users of the products, including instructions on:

- intended use (e.g. domestic, commercial);
- assembly and correct use (e.g. ergonomics if relevant);
- cleaning, maintenance and repair (including availability of parts); and
- disassembly and appropriate reuse, recycling or disposal.

For flooring and boards, the following information must also be provided:

- the recommended base/substrate and any unsuitable substrates/conditions (e.g. the recommended upper limit on the relative moisture in the underlying material and the recommended laying temperature);
- preparation of the baste/substrate (if required);
- the recommended adhesive to connect boards together and to affix the product to the base/substrate;
- if floor parts need to be connected by means of welding, the recommended method must be specified; and
- in the case of oiled and untreated wooden flooring, a description of the treatment required (type/quality oil or varnish) to achieve the intended abrasion resistance.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by appropriate documentation setting out the required information and means for it to be made available.

5.10 Product stewardship

Criteria

a The product must not be impregnated, coated or otherwise treated in a manner which would prevent reuse or recycling in New Zealand or in the country where the product is used.

b Licence holders must report annually to Eco Choice Aotearoa on product stewardship, including:

- availability, feasibility, and involvement in product takeback schemes;
- initiatives taken to promote or implement takeback schemes;
- initiatives taken to make products more reusable or recyclable; and
- initiatives or requirements for suppliers or contract manufacturers.

Verification required

Conformance with these requirements shall be demonstrated by providing a written statement on compliance, signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be accompanied by documentation that:

- includes information which demonstrates that the product can be reused or recycled;
- describes the product stewardship initiatives, procedures and programmes; and
- includes annual reports on product stewardship initiatives.

6 Product characteristics

6.1 Fitness for purpose

Criteria

a The product shall be fit for its intended use and conform, as appropriate, to relevant product performance standards.

b Factory varnished wooden floorings and parquet floorings that may be re-varnished must achieve the following standards for the number of revolutions counted before varnish is worn through (measured in accordance with NS 3506/SS923509):
- Class 1: ≥750 revolutions
- Class 2: ≥1,500 revolutions
- Class 3: ≥3,000 revolutions
- Class 4: ≥5,000 revolutions

c Laminate floor coverings must as a minimum be classified as Class 2 (General)[13]. Wearing through of the abrasion surface shall be measured in accordance with EN 13329. The area of use of the floor must be classified in accordance with the standard.

d Plastic and linoleum floor coverings must as a minimum be classified as Class 22 (Medium). If the floor has a combination of transparent and patterned or pigmented abrasion layers, this will be counted as a single abrasion layer.

e Floor coverings made from other materials must be tested to demonstrate appropriate durability, based on the intended area of use.

f Testing for resistance to moisture/rotting in fibre cement boards should be measured in accordance with AS/NZS 2908.2 *Cellulose-cement products - Flat sheets* and fire performance shall be tested in accordance with AS/NZS 3837.

g Durability of mirror glass should be measured in accordance with AS/NZS *4667 Quality requirements for cut-to-size and processed glass* standards.

Verification required

Conformance with this requirement shall be demonstrated by providing a written statement of compliance, signed by the Chief Executive Officer or other authorised

[13] Classes of area use for flooring:
Classes of use, private use (EN 685):
- Class 21: Moderate use (e.g. bedrooms)
- Class 22: Medium use (Other rooms in a dwelling, living room, hall)
- Class 23: Intense use (e.g. other rooms, living room, hall).

Classes of use, professional/public use (EN 685):
- Class 31: Moderate use (e.g. small offices, hotel bedrooms, conference rooms)

representative of the applicant company. This statement shall be supported by documentation:

- identifying the applicable standards and/or consumer/customer requirements;
- demonstrating how compliance is monitored and maintained (including quality control and assurance procedures); and
- records of customer feedback and complaints.

Test methods

ASTM D 4060-90 or EN 175.333.08 may be used and adapted (as alternatives to NS3506 /SS923509), to demonstrate compliance with (b).

Notes and questions:

Additional fitness for purposing test standards have been added to this Clause to reflect the proposed expanded product category.

Q6. Do you agree with the proposed standard for resistance to moisture/rotting in cladding in (f)? Do you know of any other applicable performance standard(s) for external cladding?

Q7. Do you agree with the proposed standard for mirrors in (g)? Do you know of any other applicable performance standard(s) for mirrors?

Q8. Please advise on any performance standard(s) you believe is applicable for composite materials.

Q9. With regards to the test standards referred to in f) and g), are you aware if these tests are available in New Zealand and that they are affordable?

6.2 Wearing parts

Criteria

All parts subject to wear are to be guaranteed for at least five years from sale.

Verification required

Conformance with this requirement shall be stated in writing and signed by the Chief Executive Officer or other authorised representative of the applicant company. This statement shall be supported by appropriate documentation setting out the guarantee arrangements.

7 Requirements and notes for licence holders

Monitoring Compliance

Prior to granting a licence, The Trust will prepare a plan for monitoring ongoing compliance with these requirements. This plan will reflect the number and type of products covered by the licence and the level of sampling appropriate to provide confidence in ongoing compliance with criteria. This plan will be discussed with the licence applicant and when agreed will be a condition of the licence.

As part of the plan, The Trust will require access to relevant quality control and production records and the right of access to production facilities. Relevant records may include formal quality management or environmental management system documentation (for example, ISO 9001 or ISO 14001 or similar).

The monitoring plan will require the licence holder to advise The Trust immediately of any noncompliance with any requirements of this specification which may occur during the term of the licence. If a non-compliance occurs, the licence may be suspended or terminated as stipulated in the Licence Conditions. The licensee may appeal any such suspension.

The Trust will maintain the confidentiality of identified confidential information provided and accessed during verification and monitoring of licences.

Using the Eco Choice Aotearoa Label

The Label may appear on the wholesale and retail packaging for the product, provided that the product meets the requirements in this specification and in the Licence Conditions. Wherever it appears, the Label must be accompanied by the Licence Number e.g. 'licence No1234' (it is optional to include the specification name).

The Label must be reproduced in accordance with:

- The Licence conditions; and
- The Eco Choice Aotearoa programme's brand kit, which includes samples of keyline art for reproduction of the Label.

Any advertising must conform to the relevant requirements in this specification, in the Licence Conditions and in the key line art. Failure to meet these requirements for using the ECA Label and advertising could result in the Licence being withdrawn.

Notes:

The Trust has updated the wording in this specification to bring it in line with other, recently revised, ECA specifications.

Appendix A: Tables

Table 1: Product description table

Product description including model name/number:									
Component description	Weight	Component material as a % of finished product weight							Supplier to the licence applicant /holder
		Wood %	Wood-based panels %	Metal %	Plastic %	*Other (please specify) %*	*Other (please specify) %*	*Other (please specify) %*	
e.g. Frame	*500 g*			*25 %*					*Supplier X*
Total % by material type:									Total %:

Complete one table for each similar product type; use a second page for a single product if necessary.
Use % ranges where appropriate, e.g. Metal: 55 – 65 %
Do **not** include small parts such as screws, nuts, washers, etc.

Table 2: Component/process supplier information

Supplier name	Supplier address and contact details (include all manufacturing locations)	Component or process supplied
e.g. Supplier A	*Address Wiri, Auckland*	*Upholstery textiles*

Include each component and subcontracted processing operation.

Table 3: Hazardous substances and materials description table

Process/Type of Chemical	Trade Name	Chemicals Name	Supplier	Safety Data Sheet (SDS)		% added by weight
				Issue date	Copy provided to ECA (√)	
e.g. Surface treatment, dye, adhesive						

Complete one table for each product

Appendix B: Hazardous substances classifications

Table 4: Hazardous substances classifications

European Risk Phrases	New Zealand HSNO Classes	Globally Harmonised System
Toxins		
R23 toxic by inhalation	6.1B or 6.1C	Acute Tox. 2 and 3 H330, H331
R24 toxic in contact with skin	6.1B	Acute Tox. 3 H311
R25 toxic if swallowed	6.1B	Acute Tox. 3 H301
R26 very toxic by inhalation	6.1A	Acute Tox. 2 and 3 H330
R27 very toxic in contact with skin	6.1A	Acute Tox. 1 H310
R28 very toxic if swallowed	6.1A	Acute Tox. 2 H300
Irritants		
R38 irritating to skin	6.3A or 6.3B	H315 or H316
Ecotoxins		
R50 very toxic to aquatic organisms	9.1A	Acute 1 H400
R51 toxic to aquatic organisms	9.1D* or 9.1B	
R52 harmful to aquatic organisms	9.1D* or 9.1C	
R53 may cause long-term adverse effects in the aquatic environment	9.1D*	Chronic 4 H413
R50/53 very toxic to aquatic life with long lasting effects	9.1A	Chronic 1 H410
R51/53 toxic to aquatic life with long lasting effects	9.1B	Chronic 2 H411
R52/53 toxic to aquatic life with long lasting effects	9.1C	Chronic 3 H412
Sensitisers		
R42 May cause sensitisation by inhalation	6.5A	Resp. Sens. 1 H334
R43 May cause sensitisation by skin contact	6.5B	Skin Sens. 1, H317

European Risk Phrases	New Zealand HSNO Classes	Globally Harmonised System
Carcinogens, mutagens and reproductive toxins		
R40 limited evidence of a carcinogenic effect	6.7B	Carc. 2 H351
R45 may cause cancer	6.7A	Carc. 1A and 1B H350
R46 may cause heritable genetic damage	6.6A	Muta. 1B H340
R49 may cause cancer by inhalation	6.7A	Carc. 1A and 1B H350
R60 may impair fertility	6.8A	Repr. 1A and 1B H360
R61 may cause harm to the unborn child	6.8A	Repr. 1A and 1B H360
R62 possible risk of impaired fertility	6.8B	Repr 2 H361
R63 possible risk of harm to the unborn child	6.8B	Repr 2 H361d
R68 possible risk of irreversible effects	6.6B	Muta. 2 H341

NOTE:

***** This excludes substances classified as 9.1D that are rapidly degradable and are not bioaccumulative.

There are different classification systems for hazardous substances that are used internationally. As the ECA specifications need to consider products that are manufactured in New Zealand and overseas, it is necessary to consider the equivalence of hazardous property classification systems in different jurisdictions. The table above shows the (broadly) equivalent European Risk Phrases, New Zealand HSNO Classifications and the United Nations' Globally Harmonised System of Classification and Labelling of Chemicals (GHS) classifications. The EU has implemented the GHS into EU law, replacing the Risk Phrases, and all "substances" (single compounds) have now been transferred to the new classification system. Mixtures must be classified under the GHS by 31 May 2015.

It is important to note that the Risk Phrases, HSNO Classifications and GHS are classification frameworks and the particular classifications applied to a substance may vary between jurisdictions (for example Europe, the United States and New Zealand each have their own agency with responsibility for assessing and classifying hazardous substances). Differences between classifications can be due to the weight placed on particular toxicity studies (i.e. a jurisdiction may consider that a study is flawed) or in the event that new information becomes available (i.e. differences in the timing of the classification or re-classification of a substance).

Where there is a discrepancy between the classifications applied to specific substances in the different schemes, The Trust's appointed technical advisors will review supporting information regarding the classifications on a case-by-case basis to determine and recommend to The Trust how these discrepancies should be managed within the life cycle context of the relevant product category. Where appropriate, technical clarifications and changes, with accompanying explanation, will be included in the relevant specification.