CONSTRUCTION INDUSTRY COUNCIL

CIC GREEN PRODUCT CERTIFICATION

Assessment Standard

Furniture

(Version 2.0)

Furniture

Summary of Assessment Criteria

CORE CRITERIA

Criteria	Requirements	Verification	Points		Index
			Basic	+Bonus	
Product Information	Provide following information with delivered products or made accessible to public: • Basic product specifications • The intended use of the product • Instructions for correct use and storage to maximise the lifetime of the product • Recommended maintenance instructions for the product • Installation method • Instructions for consumer product disposal • Country of origin	Documentation including but not limited to product catalogue, technical datasheet, webpages	**5**	-	4.1.1
RESOURCE					
Material Optimization	Raw Material: For wood, metal, plastic and glass/mirror parts contributing to over 5 % of the total weight of the product, basic and bonus points are awarded for specific recycled content or sustainable source.	Material summary with calculation	**10**	+5	4.3.1.1
ENVIRONMENT					
Human Toxicity and Ecosystem Impact	Heavy Metals: Products without coating; OR Limit the concentration of Cadmium, Lead, Chromium VI , Mercury, Barium in paints, coatings and primers applied below limitations • Cadmium (75 mg/kg) • Lead (90 mg/kg) • Chromium VI (60 mg/kg) • Mercury (60 mg/kg) • Barium (1000 mg/kg)	Laboratory test report(s)	**10**	-	4.4.3.2

Criteria	Requirements	Verification	Points		Index
			Basic	+Bonus	
Volatile Organic Compounds (VOC)	Formaldehyde: Products shall not exceed the following emission limits: • 0.1 mg per m3 per hour at 24 hours [10 basic] OR • 0.05 mg per m3 per hour at 24 hours (+5 bonus)	Laboratory test report(s)	**10**	+5	4.4.4.1
	VOC content: Products shall not exceed the following emission limits: • 0.25 mg per m3 per hour at 24 hours [10 basic] OR • 0.1 mg per m3 per hour at 24 hours (+5 bonus).	Laboratory test report(s)	**10**	+5	4.4.4.2
PERFORMANCE					
Product Life	Durability: The durability of furniture products shall meet the requirements of at least one of the internationally recognized standards or other equivalent international standards to ensure structural integrity and long-term performance.	Laboratory test report(s) for all relevant quality and performance tests	**5**		4.5.2.1
		Subtotal:	**50**	+15	

NON-CORE CRITERIA

Criteria	Requirements	Verification	Points +Bonus	Index
CARBON				
CFP quantification	Provide a life cycle assessment report with the carbon footprint of products (CFP), covering at least A1 to A3 endorsed by a third-party critical review *OR* provide an Environmental Product Declaration (EPD).	CFP quantification report **OR** Environmental Product Declaration (EPD)	+5/+10	4.2.1
RESOURCE				
Circularity	Recyclability: Developed a recycling plan for the product and declared options for reuse, recycling, recovery and disposal. The plan shall include the following and made available to public.	Recycling plan	+5	4.3.2.1
	Packaging Requirement: The packaging materials shall not contain halogenated plastics; *OR* Shall be comprised of 100% recycled materials, readily recyclable materials or decomposable materials; *OR* shall not be impregnated, labelled, coated or otherwise treated in a manner, which would prevent or significantly limit recycling.	Documentation on packaging materials used	+5	4.3.2.2
Waste Management	Waste Management Plan: Implement effective Waste Management Plan detailing the policies, procedures and/or a waste management program covering manufacturing operations	Waste management programme	+5	4.3.3.1
Water Management	Option A: Water Consumption Reporting: Report both potable and non-potable water usage in the production process of the past year.	Water consumption report	+5/ +10	4.3.4.1
	Water Recycling Program: Develop and implement water recycling program during the manufacturing process.	Documentation on water recycling		4.3.4.2
	Option B: Water Management System: Process valid certificate under ISO 14046: Water Footprint Assessment	ISO 14046 Certificate issued by accredited certification body		4.3.4.3

Criteria	Requirements	Verification	Points +Bonus	Index
Energy Management	Option A: Energy Management Plan: Implement effective energy management policies and procedures and/or an energy management programme.	Energy management plan	+5/ +10	4.3.5.1
	Option B: Energy Management System: Possess valid certificate under ISO 50001: Energy management systems.	ISO 50001 Certificate issued by accredited certification body		4.3.5.2
ENVIRONMENT				
Environmental Management	Environmental Management System: Possess valid certificate under ISO 14001: Environmental management systems or EU Eco-Management and Audit Scheme (EMAS).	ISO 14001 or EMAS Certificate issued by accredited certification body	+5	4.4.1.1
Regional Product	Regional Product: Products that are manufactured within 800km radius of HKSAR by road transportation; within a 1,600km radius by rail transportation; or within a 4,000km radius by sea transportation.	Location map	+5	4.4.2.1
Human Toxicity and Ecosystem Impact	Hazardous Substances: No carcinogenic substances. No fatal, harmful or toxic substances. Phenols. And potentially explosive chemicals shall be less than 0.1%.	Laboratory test report(s) or self-declaration letter	+5	4.4.3.1
	Flame Retardant: Concentration of the flame-retardants in the product shall be below 0.1% by weight of the product. The restricted fire retardants including the following types: • Polybrominated diphenyl ether (PBDEs) • Polybrominated biphenyls (PBBs) • Short-chained chlorinated paraffin (SCCPs) • Hexabromocyclododecane (HBCD)	Laboratory test report(s)	+5	4.4.3.3
PERFORMANCE				
Flexibility	Design for Disassembly: The product shall be designed in a way that can be readily disassembled into reusable or recyclable parts.	Product instruction or description	+5	4.5.1.1
	Multifunctional Design: The design of the furniture shall enable it to be flexible or multi-functional to achieve sustainable use	Product instruction or description	+5	4.5.1.2

Criteria	Requirements	Verification	Points +Bonus	Index
INNOSMART				
Innovations & Additions	Adopt new practice, technology and strategy, *OR* Achieve exemplary performance	Narrative with supporting	+5	4.6.1
		Subtotal:	+80	

TABLE OF CONTENT

1. INTRODUCTION

1.1 PURPOSE

The CIC Green Product Certification Scheme (the "Scheme") is a green product labelling scheme, owned by the Construction Industry Council (CIC) and implemented by the Hong Kong Green Building Council (HKGBC). The primary goal of the scheme is to support Hong Kong's transition to a low-carbon economy by encouraging the adoption of environmentally friendly construction practices.

With the Green Product Certification, various stakeholders, including consumers, building professionals, construction practitioners and policymakers, can easily and unequivocally identify environmentally preferable construction materials and building products. This certification serves as a reliable indicator of a product's sustainability, helping to drive market demand for greener options.

To ensure the credibility and effectiveness of the certification, the CIC and the HKGBC has jointly developed this Technical Assessment Standards (the "Standard"), which sets out the assessment criteria and their benchmarks to govern the application and award of a label under the Scheme. The comprehensive assessment evaluates the overall sustainability of construction materials and building products across multiple dimensions. These dimensions include environmental impact, resource efficiency, technical performance, and the use of smart manufacturing technologies.

The Standard is divided into two main parts:

- General Requirements (Refer to General Requirements provided in separate document). This part introduces Scheme's framework, outlines the application procedure, and details the grades.

- Technical Requirements (This document refers). This part defines the principles, requirements and guides for quantifying and reporting the products' carbon footprint (CFP), along with other sustainability assessment criteria and scoring standards.

This Standard neither modifies nor supersedes laws and regulations. Compliance with this Standard is not a substitute for, and does not assure, compliance with any applicable laws or regulations. Compliance with all applicable laws and regulations is a prerequisite for the manufacturing and marketing of the product.

1.2 BACKGROUND

Domestic and office furniture products can place a significant burden on the environment, from raw material extraction to potential health hazards in the use phase. With increasing environmental claims of furniture products in the market, a more comprehensive and systematic approach to assess the environmental impacts of the furniture products shall be developed. The aim of this Standard is to help designers and end-users choosing greener products by conserving resources, reducing the amount of waste disposal in landfills and reducing the impact to human health throughout the life cycle of the furniture products. The development of the assessment criteria in this Standard has made references to worldwide relevant eco-labelling schemes and some existing life cycle assessment (LCA) studies.

2. SCOPE

The scope of this Standard is applicable to domestic and office furniture for interior use, including tables, chairs, beds, desks, dressers, cupboards, cabinets, bookshelves, and wardrobes. Other products such as mattress, mirror, curtains, recreational outdoor furniture, and furniture made with leather and textile (e.g. sofa) are excluded from this Standard. Domestic and office furniture for interior use that contain glass or mirror as part of their functions are also included in this Standard.

Option A – function use:

The type of domestic and office furniture for interior use, including tables, chairs, beds, desks, dressers, cupboards, cabinets, bookshelves, and wardrobes, shall be specified clearly in each application.

Subsequent application is also available for similar or new products with same raw materials and function of a labelled product series, which is only eligible for applying within the validity period of the label.

Option B – tailor-made product:

The raw materials used, and room types shall be specified clearly in each application. All related products have to be listed on the submitted documents.

E.g. Wood panel A – Metal B – Living room is regarded as one application

Room types include:

Living room	Dining room	Bedroom	Study room
Kitchen	Bathroom	Studio	

Subsequent application is also available for similar products with same raw materials of a labelled product series, but not for the same room types, which is only eligible for applying within the validity period of the label.

3. DEFINITIONS

AFCS:	Australian Forest Certification Scheme
Applicant:	Organisations which apply for the label of the CIC Green Product Certification of the Construction Industry Council
ASTM:	American Society for Testing and Materials
BS:	British Standards
CIC:	Construction Industry Council
CNAS:	China National Accreditation Service for Conformity Assessment
Design for disassembly:	A characteristic of product's design that enables the product be taken apart at the end of its useful life so as to allow components and parts to be reused, recycled, recovered for energy or, in some other ways, diverted from the waste stream (according to definition 7.2.1 of ISO 14021)
EMAS:	Eco-Management and Audit Scheme (EMAS) is an environmental management tool which enables organisations to assess, manage and continuously improve their environmental performance.
FSC:	Forest Stewardship Council
HKAS:	Hong Kong Accreditation Service
HKGBC:	The Hong Kong Green Building Council Limited
HOKLAS:	The Hong Kong Laboratory Accreditation Scheme
IARC:	International Agency for Research on Cancer
ISO:	International Organisation for Standardisation
MSDS:	Material safety data sheet. To qualify as suitable, MSDS and information therein must not be more than 5-years old
PEFC:	Programme for the Endorsement of Forest Certification
Post-consumer recycled content:	Consumer waste, generated by end-users and can no longer be used for its intended purpose. Examples include construction and demolition debris, materials collected through recycling programs, discarded products (e.g., furniture, cabinetry, decking), and landscaping waste (e.g., leaves, grass clippings, tree trimmings).
Pre-consumer	Recycled content comes from process waste that is used to make a different product.

recycled content:	
Third-party:	An entity without any financial interest or stake in the sales of the product or service being evaluated or other conflict of interest
VOC:	Volatile organic compounds refer to any organic compound (compound which contains carbon) with either a boiling point below 250°C measured at 101.3 kPa or a vapour pressure of more than 0.1 mm Hg measured at 25°C

4. EVALUATION CRITERIA

A product to be assessed shall meet all the minimum requirements of the "Core Criteria" in order to be awarded a "Green" (i.e. a "pass" grade) Label under the Scheme. Bonus points may be awarded if the product meets the "Non-core Criteria". "Bronze", "Silver", "Gold" or "Platinum" Label will be awarded according to the total points accumulated, as shown in Table 1.

Table 1 Benchmarks for grading

Points achieved	Grade to be awarded
90 or above	Platinum
80 – 89	Gold
70 – 79	Silver
60 – 69	Bronze
50 – 59	Green
Below 50	No label

All submissions and documentations shall be endorsed by the Chief Executive Officer or other authorised persons of the Applicant to demonstrate conformance to the assessment criteria. All certification, laboratory report and documentation must be valid during the assessment process and labelling period. The validity of all laboratory report and documentation shall be within 5 years from the date of issue. The chemical tests should be conducted by either a third party or the manufacturer, providing that they have obtained ISO 17025 certification or relevant national accreditations, such as HOKLAS or CNAS.

4.1 BASIC INFORMATION

4.1.1 Product Information – Core Criteria

The Applicant is required to achieve 5 Basic Points under this section.

Requirements

5 Basic Points for providing following information with delivered products or made accessible to public:

- Basic product specifications
- The intended use of the product
- Instructions for correct use and storage to maximise the lifetime of the product
- Recommended maintenance instructions for the product
- Installation method
- Instructions for consumer product disposal
- Country of origin

Verification

Documentation showing the product information and instructions, including but not limited to product catalogue, technical datasheet, webpages and/or any other information freely accessible by customers.

4.2 CARBON

4.2.1 CFP Quantification – Non-core Criteria

The Applicant can achieve maximum 10 Bonus Points under this section.

Requirements

5 Bonus Points for providing life cycle assessment report for quantifying and reporting the carbon footprint of products (CFP), covering at least A1 (raw material supply), A2 (transport) and A3 (manufacturing process).

OR

10 Bonus Points for providing the product's CFP value from a product level EPD issued in accordance with ISO 14025:2006, ISO 14067:2018, ISO 21930:2017, GB/T 24067-2024 or BS EN 15804:2012.

Verification

Either of the following documents shall be provided for verification.

CFP quantification report endorsed by a third-party critical review, in accordance with ISO 14067:2018 or equivalent

OR

Environmental Product Declaration fulfilling the above requirements

4.3 RESOURCE

4.3.1 Material Optimization

The Applicant is required to achieve 10 Basic Points under this section. Additionally, the Applicant can achieve maximum 5 Bonus Points under this section.

4.3.1.1 Raw Material – Core Criteria

Requirements

10 Basic Points for demonstrating the following

For wood, metal, plastic and glass/mirror parts contributing to over 5 % of the total weight of the product, the material shall meet the following minimum requirements, unless otherwise specified:

Wood

- The product shall be made from at least 80% recycled wood or at least 60% forest management certification, such as FSC, PEFC, SFI, or AFCS certified wood; and
- 5 bonus points will be awarded if the product is made of at least 90% recycled wood or at least 80% forest management certification, such as FSC, PEFC, SFI, or AFCS certified wood.

Metal

- For aluminium, at least 50% by weight of the aluminium used in the product shall be from recycled aluminium. 5 bonus points will be awarded if the aluminium components are made of 80% (by weight of total aluminium) of recycled aluminium.
- For other metals (excluding aluminium): at least 20% by weight of the metal in the product shall be recycled metal. 5 bonus points will be awarded if the metal components are made of 50% (by weight of total metal) of recycled metal.

Plastic

- The product shall not contain any plastic parts which are made of PVC.
- 5 bonus points will be awarded if the product is made of at least 10% of recycled plastics by weight of the product.

Glass / Mirror

- Lead glass, crystal glass and wire reinforced glass shall not be used in the furniture.
- Glass / mirror used in the furniture shall be readily replaceable if it is damaged or smashed. The metal coating used in glass / mirror shall not contain lead (Pb) and/or copper (Cu) in excess of 0.2% by weight.

- 5 bonus points will be awarded if glass / mirror contain recycled content.

Verification

Design specification of the product for all materials and components used; copy of certificate(s) issued by an accredited certification body according to local or national accreditation services (i.e. HKAS, CNAS); factory records of the procurement of waste or recycled materials.

4.3.2 Circularity

The Applicant can achieve maximum 10 Bonus Points under this section.

4.3.2.1 Recyclability – Non-core Criteria

Requirements

5 Bonus Points for demonstrating that the manufacturer has developed a recycling plan for the product and declared options for reuse, recycling, recovery and disposal. The plan shall include the following and made available to public.

- Designate all homogeneous materials in the product as being intended for technical and/or biological cycles and define the intended cycling pathway(s) for each material.
- Identify potential partners for product reuse, recycling, recovery in accordance with the intended cycling pathway(s).
- For products and materials intended for municipal recycling, the product and/or material must be compatible for municipal cycling systems (e.g., painted plastics and plastic laminated paper are not currently compatible for municipal recycling).
- Instructions for how to cycle the product shall be made publicly available.

Verification

Documentation of recycling plan, including, but not limited to product catalogue, MSDS and written declaration.

4.3.2.2 Packaging Requirement – Non-core Criteria

Requirements

5 Bonus Points for minimizing the wastage from all primary packaging materials. The packaging materials shall achieve either of the followings.

The packaging materials shall not contain halogenated plastics

OR

The packaging materials shall be comprised of 100% recycled materials, readily recyclable materials or decomposable materials

OR

The packaging shall not be impregnated, labelled, coated or otherwise treated in a manner, which would prevent or significantly limit recycling.

Verification

Documentation describing the packaging materials used as well as their chemical composition (if any and where applicable), treatment process and recyclability.

4.3.3 Waste Management

The Applicant can achieve maximum 5 Bonus Points under this section.

4.3.3.1 Waste Management Plan – Non-core Criteria

Requirements

5 Bonus Points for implementing effective Waste Management Plan detailing the policies, procedures and/or a waste management program covering manufacturing operations. The waste management plan should include but not limited to the following information:

- Initiatives taken to reduce waste generation and improve recovery/recycling of waste
- Initiatives implemented for recovery of post-consumer and/or pre-consumer waste that can be re-introduced into the manufacturing process and
- Other environmental benefits or constraints associated with waste minimisation objectives and processes.

Verification

Documentation of waste management programme.

4.3.4 Water Management

The Applicant can achieve maximum 10 Bonus Points under this section.

The Applicants can select one of the options below and comply with any or all the requirements under that option to achieve associated points. Each option is eligible for a maximum 10 Bonus Points.

Option A:

4.3.4.1 Water Consumption Reporting – Non-core Criteria

Requirements

5 Bonus Points for reporting both potable and non-potable water usage in the production process of the past year.

Verification

Water consumption report, support by water usage data acquired from water meter, water sub-meter, water bill or other equivalent documents.

4.3.4.2 Water Recycling Program – Non-core Criteria

Requirements

5 Bonus Points for developing and implementing water recycling program during the manufacturing process.

Verification

Documentation demonstrating the implementation of water recycling program, support by drawings, water usage data acquired from water sub-meter or other equivalent documents.

Option B:

4.3.4.3 Water Management System – Non-core Criteria

Requirements

10 Bonus Points for possessing valid certificate under ISO 14046: Environmental management – Water footprint – Principles, requirements and guidelines.

ISO 14046 is a framework for assessing the water footprint of products, processes, and organizations. It provides principles, requirements, and guidelines for conducting and reporting water footprint assessments. It helps organizations evaluate and improve their water management practices.

Verification

A valid ISO 14046 certificate issued by accredited certification body.

4.3.5 Energy Management

The Applicant can achieve maximum 10 Bonus Points under this section.

The Applicants can select one of the options below and comply with any or all the requirements under that option to achieve associated points.

Option A:

4.3.5.1 Energy Management Plan – Non-core Criteria

Requirements

5 Bonus Points for implementing effective energy management policies and procedures and/or an energy management programme, including but not limited to the following items:

- Energy efficiency initiatives: Manufacturer should undertake specific initiatives to reduce energy use and improve energy efficiency throughout their operations. This could include upgrading to more efficient equipment, optimizing production processes, or implementing energy-saving technologies

- Supplier requirements: Manufacturers should extend their energy management efforts to their supply chain by establishing requirements or initiatives for suppliers and contract manufacturers to improve their energy performance where possible

Verification

Documentation of Energy Management Plan detailing the above, supported by organizational policy or other equivalent documents.

Option B:

4.3.5.2 Energy Management System – Non-core Criteria

Requirements

10 Bonus Points for possessing valid certificate under ISO 50001: Energy management systems — Requirements with guidance for use.

ISO 50001 provides a framework for organizations to establish, implement, maintain, and improve an Energy Management System. The goal is to help organizations improve their energy performance, increase energy efficiency, and reduce energy costs and greenhouse gas emissions. By achieving ISO 50001 certification, manufacturers can demonstrate their commitment to energy efficiency and sustainability

Verification

A valid ISO 50001 certificate issued by accredited certification body.

4.4 ENVIRONMENT

4.4.1 Environmental Management

The Applicant can achieve maximum 5 Bonus Points under this section.

4.4.1.1 Environmental Management System – Non-core Criteria

Requirements

5 Bonus Points for possessing valid certificate under ISO 14001: Environmental management systems — Requirements with guidance for use or EU Eco-Management and Audit Scheme (EMAS).

The target of the environmental management system shall be set to reduce the environmental impacts during the manufacturing process which include but not limited to the reduction of hazardous substance emissions, energy consumption, CO_2 emissions, secondary environmental load, waste management, water management, etc.

ISO 14001 is the international standard which provides an outline of how to meet the environmental policy and objectives for the business of the applicant.

Eco-Management and Audit Scheme (EMAS) is an environmental management tool which enables organisations to assess, manage and continuously improve their environmental performance.

Verification

A valid ISO 14001 or EMAS certificate issued by accredited certification body

4.4.2 Regional Product

The Applicant can achieve maximum 5 Bonus Points under this section.

4.4.2.1 Regional Product – Non-core Criteria

Requirements

5 Bonus Points for products that are manufactured within 800km radius of HKSAR by road transportation; within a 1,600km radius by rail transportation; or within a 4,000km radius by sea transportation. The distance is measured by the direct distance, not by actual travel distance.

Verification

Documents demonstrating the location of the manufacturer and a map showing the distance between the manufacturer and HKSAR.

4.4.3 Human Toxicity and Ecosystem Impact

The Applicant is required to achieve 10 Basic Points under this section. Additionally, the Applicant can achieve maximum 10 Bonus Points under this section.

4.4.3.1 Hazardous Substances – Non-core Criteria

Requirements

5 Bonus Points for demonstrating the following

Concentration of the hazardous substances in the product shall be below 0.1% by weight of the product. The limited hazardous substances including the following types:

- Phenols;
- Potentially explosive chemicals;
- The product shall not contain any carcinogenic substances or chemicals that are classified as Group 1, 2A or 2B according to International Agency for Research on Cancer (IARC)[1]. Any such carcinogens which are known to be present as contaminants shall be less than 0.1% by weight of the product.
- Any substances classified as H300 - Fatal if swallowed, H301 - Toxic if swallowed, H302 - Harmful if swallowed, H310 - Fatal in contact with skin, H311 - Toxic in contact with skin, H312 - Harmful in contact with skin, H330 - Fatal if inhaled, H331 - Toxic if inhaled ,H332 - Harmful if inhaled, in accordance with Regulation (EC) No 1272/2008 of the European Parliament and of the Council[2].

[1] Agents Classified by the IARC Monographs, Volumes 1–137 – IARC Monographs on the Identification of Carcinogenic Hazards to Humans
[2] Regulation - 1272/2008 - EN - clp regulation - EUR-Lex

Verification

Documentation including, but not limited to, product catalogue, MSDS, and written declaration.

4.4.3.2 Heavy Metals – Core Criteria

Requirements

10 Basic Points for demonstrating the following:

Coating used on the furniture shall not contain the following heavy metals or their compounds.

If the coating used on the furniture (both the metal parts or the others parts) contain the following heavy metal or their compounds, the concentration of heavy metal by weigh in the coating shall meet the requirement as stated below.

- Cadmium (75 mg/kg)
- Lead (90 mg/kg)
- Chromium VI (60 mg/kg)
- Mercury (60 mg/kg)
- Barium (1000 mg/kg)

Verification

Laboratory test report(s). Test report(s) shall be compiled according to the National and International test methods including but not limited to ISO 3856-4 or ASTM D3335 for cadmium, ISO 3856-1 or ASTM D3335 for lead, ISO 3856-7 or ASTM D3624 for mercury

4.4.3.3 Flame Retardants – Non-core Criteria

Requirements

5 Bonus Points for demonstrating that concentration of the flame retardants in the product shall be below 0.1% by weight of the product. The restricted flame retardants including the following types:

- Polybrominated diphenyl ether (PBDEs)
- Polybrominated biphenyls (PBBs)
- Short-chained chlorinated paraffin (SCCP)
- Hexabromocyclododecane (HBCD)

Verification

Laboratory test report(s).

4.4.4 Volatile Organic Compounds (VOC)

The Applicant is required to achieve 20 Basic Points under this section. Additionally, the Applicant can achieve maximum 10 Bonus Points under this section.

4.4.4.1 Formaldehyde – Core Criteria

Requirements

Products shall not exceed the following emission limits:

- 10 Basic Points are awarded for products meeting a maximum formaldehyde emission rate of 0.25 mg per m^3 per hour at 24 hours
- 5 Bonus Points are awarded for products meeting a maximum formaldehyde emission rate of 0.1 mg per m^3 per hour at 24 hours

Verification

Laboratory testing report(s) on formaldehyde emissions according to ANSI/BIFMA M7.1-2011 Test Method for determining VOC Emissions. Other related testing methods are also acceptable with justification provided by the applicant.

4.4.4.2 VOC content - Core Criteria

Requirements

Products shall not exceed the following emission limits:

- 10 Basic Points are awarded for products meeting a maximum VOC emission rate of 0.1 mg per m^3 per hour at 24 hours
- 5 Bonus Points are awarded for products meeting a maximum VOC emission rate of 0.05 mg per m^3 per hour at 24 hours

Verification

Laboratory testing report(s) on VOC emissions according to ANSI/BIFMA M7.1-2011 Test Method for determining VOC Emissions. Other related testing methods are also acceptable with justification provided by the applicant.

4.5 PERFORMANCE

4.5.1 Flexibility

The Applicant can achieve maximum 10 Bonus Points under this section.

4.5.1.1 Design for Disassembly – Non-core Criteria

Requirements

5 Bonus Points for demonstrating the following

The product shall be designed in a way that can be readily disassembled into reusable or recyclable parts. Explanatory statement shall be supplemented to specify the components or parts to be reused, recycled, recovered for energy or, in some other ways, diverted from the waste stream. The Applicant shall refer to the definition and qualifications as stated in Section 7.4 of ISO 14021 Environmental Labels and Declarations – Self-declared Environmental Claims (Type II Environmental Labelling).

Verification

Instructions showing how disassembly can be achieved with commonly available tools.

4.5.1.2 Multi-functional Design – Non-core Criteria

Requirements

5 Bonus Points for demonstrating the following

The design of furniture cannot only help to fulfil the need of comfort, but can also increase the flexibility of the furniture and enable it to be multi-functional, e.g. bed combo with storage shelves, etc. Embedding innovation into the design of furniture helps to achieve sustainable use in space and reduce the consumption of material.

The design of the furniture shall enable it to be flexible or multi-functional in order to achieve sustainable use in terms of:

- Saving domestic space;
- Using less material;
- Be adaptable in shape or functions, etc.

Verification

Product instruction or description that demonstrate its capability of being multi-functional with an aim to achieve sustainable use, such as saving the domestic space and material, etc. should be submitted.

4.5.2 Product Life

The Applicant is required to achieve 5 Basic Points under this section.

4.5.2.1 Durability – Core Criteria

Requirements

5 Basic Points for demonstrating the following:

The durability of furniture products shall meet the requirements of at least one of the following internationally recognized standards or other equivalent international standards to ensure structural integrity and long-term performance:

- American Standards (ANSI/BIFMA): ANSI/BIFMA X5.1, X5.5, X5.9
- Chinese Standards (GB/T): GB/T 10357.3, QB/T 2280, GB/T 10357.1, GB/T 10357.6, GB/T 10357.5.

- European Standards (EN): EN 12520, EN 16139, EN 1728, EN 527

Products should be tested according to these standards or equivalent documents to confirm compliance.

Verification

Laboratory test report(s) on performance according to BS 4875, ANSI/BIFMA or equivalent

4.6 INNOSMART

4.6.1 Innovations & Additions – Non-core Criteria

The Applicant can achieve maximum 5 Bonus Points under this section.

Requirements

5 Bonus Points for achieving significant, measurable environmental performance using new practices, technology and strategy not addressed in this Standard.

OR

Demonstrating exemplary performance in any of the existing assessment criteria.

The benefits of environmental performance can be achieved throughout the lifecycle of the products, covering the product, construction process, use and end of life stage. Examples of innovative and smart technologies are shown below.

- Adopt Smart technology at manufacturing facility, such as automation and robotics, to enhance the efficiency of production process.
- Deploy digital platforms to enhance the production, logistics, management of the manufacture, enabling data-driven decision making and optimization.
- Implement systems, such as IoT devices, for real-time hazard detection and monitor the health and safety of workers.
- Reduce Scope 1 carbon emission with process improvements, or carbon capture and utilization technology.
- Enhance the functionality of the product, such as self-cleaning technology, photo-chromic windows

Verification

Report with a maximum length of 1,000 words, outline the objectives, solution and evaluation of the performance achieved by proposed Smart and Innovative Technologies.

AND

Include attachments that provide evidence of implementation, along with relevant technical specification that support the claims made in the report.

5. SCORING

The points for meeting each criterion stated in this Standard are summarized below.

Table 2:Points to be awarded under the assessment criteria of this Standard

Label	Evaluation Criteria		Points		Related BEAM Plus Credits
			Basic	+Bonus	
	Product Information [CORE]		5	-	
Carbon	CFP quantification		-	+5/+10	MW 10
Resource	Material Optimization	Raw Material [CORE]	10	+5	MW 6
	Circularity	Recyclability	-	+5	
		Packaging Requirement	-	+5	
	Waste Management	Waste Management Plan	-	+5	
	Water Management	Water Consumption Reporting	-	+5/+10	
		Water Recycling Program			
		Water Management System			
	Energy Management	Energy Management Plan	-	+5/+10	
		Energy Management System			
Environment	Environmental Management	Environmental Management System	-	+5	
	Regional Product	Regional Product	-	+5	MW 8
	Human Toxicity and Ecosystem Impact	Hazardous Substances	-	+5	
		Heavy Metals [CORE]	10	-	
		Flame Retardants	-	+5	
	Volatile Organic Compounds (VOC)	Formaldehyde [CORE]	10	+5	
		VOC Content [CORE]	10	+5	HWB8
Performance	Flexibility	Design for Disassembly	-	+5	
		Multifunctional Design	-	+5	
	Product Life	Durability [CORE]	5	-	MW 4
InnoSmart	Innovation & Additions		-	+5	IA
		Total:	**50**	**+95**	

Related BEAM Plus Credits refer to these relevant credits under BEAM Plus New Buildings Version 2.0, as listed below.

- MW 4: Design for Durability and Resilience
- MW 6: Recycled Materials
- MW 8: Regional Materials
- MW 9: Use of Green Products.
- MW 10: Life Cycle Assessment
- HWB 8: Indoor Air Quality
- Innovations & Additions