

CONSTRUCTION INDUSTRY COUNCIL

CIC GREEN PRODUCT CERTIFICATION

Assessment Standard

Wall Covering



CIC GREEN
PRODUCT CERTIFICATION

(Version 2.0)

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WALL COVERING

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: <ul style="list-style-type: none"> • Basic product specifications • Country of origin • Installation method • Instructions for correct use and storage to maximize the lifetime of the product • Methods of cleaning application equipment • Possible toxicity or health hazards imposed by the chemical components 	Documentation including but not limited to product catalogue, technical datasheet, webpages	5	-	4.1.1
RESOURCE					
Material Optimization	Raw Material: Paper: <ul style="list-style-type: none"> • ≥20% Recycled content <i>OR</i> • ≥50% Raw materials from sustainable sources Fabric/Plastic: <ul style="list-style-type: none"> • ≥20% Recycled content 	Documentation including but not limited to product catalogue, MSDS, written declaration, certification	15	-	4.3.1.1
ENVIRONMENT					
Human Toxicity and Ecosystem Impact	Heavy Metals: The heavy metals in the product shall be less than the following limits	Laboratory test report(s)	10	-	4.4.3.2
	Heavy Metal				
	Limits (mg/kg)				
	Arsenic				
	Barium				
	Cadmium				
	Chromium				
	Lead				
	Mercury				
Volatile Organic Compounds (VOC)	Formaldehyde: < 0.05 ppm	Laboratory test report(s)	5	-	4.4.4.1
	TVOC Content: < 0.5 mg/m ³	Laboratory test report(s)	5	-	4.4.4.2

Criteria	Requirements	Verification	Points		Index
			Basic	+Bonus	
PERFORMANCE					
Product Life	Serviceability: A product’s durability and functionality must be demonstrated through at least FOUR relevant test items. Relevant tests include but not limited to: <ul style="list-style-type: none">• Abrasion Resistance• Washability• Stain Resistance• Colourfastness• Fire Resistance• Impact Resistance• Tensile• Moisture Resistance• Mildew and Fungal Resistance• Dimensional Stability	Laboratory test report(s) for all relevant quality and performance tests	10	-	4.5.1.1
		Subtotal:	50	-	

NON-CORE CRITERIA

Criteria	Requirements	Verification	Points	Index
			+Bonus	
CARBON				
CFP quantification/ EPD report	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 <i>OR</i> 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; <i>OR</i> Shall be comprised of 100% recycled materials, readily recyclable materials or decomposable materials; <i>OR</i> 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
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

Criteria	Requirements	Verification	Points	Index
			+Bonus	
	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	<p>Hazardous Substances: The following substances in the products shall be less than the below limits (% by weight of the product):</p> <ul style="list-style-type: none"> • Chlorofluorocarbons (CFCs): 0.1%; • Chlorophenols: 20 µg/kg of fibre in textile materials; • Extractable organic halogens (EOX): 3 mg/kg fibre in textile materials; and • Release of vinyl chloride monomer: 1 mg/kg. <p>AND The following substances shall not be added in the manufacturing process:</p> <ul style="list-style-type: none"> • Sodium hexafluorosilicate; • N-(a-(1-nitroethyl)benzyl)-ethylene diamine • Mixture of tris-(hydroxymethyl)- nitromethane, 5-chloro-2-methyl-4- • Isothiazoline-3-on and 2-methyl-4- isothiazoline-3-on • Tetramethylthiuram disulphide • Chemicals for bleaching including chlorine, halogenated chemicals or hardly biodegradable complexing agents, such as ethylenediaminetetraacetic acid (EDTA) and diethylenetriaminepentaacetic acid (DTPA) <p>AND For Carcinogenic Substances, the product shall be listed in IARC Group 1, 2A and 2B shall be < 0.1% by weight of the product.</p>	Laboratory test report(s) or self-declaration letter	+5	4.4.3.1

Criteria	Requirements	Verification	Points	Index
			+Bonus	
	Plasticisers: Concentration of phthalate in the product below 0.1% by weight of the product. The limited phthalates including the following types: <ul style="list-style-type: none"> • Bis(2-ethylhexyl)phthalate (DEHP) • Dibutyl phthalate (DBP) • benzylbutylphthalate (BBP) • Diisononylphthalate (DINP) • Diisodecylphthalate (DIDP) Di-n-octylphthalate (DNOP)	Laboratory test report(s)	+5	4.4.3.3
	Printing Ink: Printing ink used for producing wallpaper shall be water soluble.	Laboratory test report(s), MSDS and production documentation	+5	4.4.3.4
INNOSMART				
Innovations & Additions	Adopt new practice, technology and strategy. <i>OR</i> Achieve exemplary performance	Narrative with supporting	+5	4.6.1
		Subtotal:	+75	

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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

Wall coverings are commonly used for decorating the internal wall of buildings. The production process of wall covering materials emits pollutants, as well as generating adverse impacts to the environment and human health. Wall covering materials such as wallpaper may also cause indoor air pollution by emitting hazardous substances including formaldehyde and aldehydes.

The purposes of this Standard for wall covering are, therefore, to minimise the use and subsequent release of harmful substances to the environment and human throughout the product's life cycle; to conserve resources and energy, to reduce the amount of waste disposed in landfills. The development of the criteria in this Standard has made references to worldwide relevant eco-labelling schemes and some existing life cycle assessment (LCA) studies.

2. SCOPE

This Standard applies to finish wall coverings used on interior building surfaces where the wall covering is positioned at an angle of not less than 30 degrees from the ceiling or floor plane. The scope specifically excludes any support structures/systems used to install the wall covering. For products employing both a coating and substrate system, acceptable coating and substrate materials may include vinyl, acrylic, fabric, textile, paper, or natural materials. Paints and standalone coatings are not covered under this Standard.

Subsequent application is also available for similar products with the same raw materials of a labelled product series, which is only eligible for applying within the validity period of the label. Maximum **5 (FIVE)** subsequent applications are allowed for each first application.

3. DEFINITIONS

<i>Applicant:</i>	Organisations which apply for the label of the CIC Green Product Certification of the Construction Industry Council
<i>ASTM:</i>	American Society for Testing and Materials
<i>BS:</i>	British Standards
<i>CIC:</i>	Construction Industry Council
<i>CNAS:</i>	China National Accreditation Service for Conformity Assessment
<i>EMAS:</i>	Eco-Management and Audit Scheme (EMAS) is an environmental management tool which enables organisations to assess, manage and continuously improve their environmental performance.
<i>HKAS:</i>	Hong Kong Accreditation Service
<i>HKGBC:</i>	The Hong Kong Green Building Council Limited

<i>HOKLAS:</i>	The Hong Kong Laboratory Accreditation Scheme
<i>IARC:</i>	International Agency for Research on Cancer
<i>ISO:</i>	International Organisation for Standardisation
<i>MSDS:</i>	Material safety data sheet. To qualify as suitable, MSDS and information therein must not be more than 5-years old
<i>NSF:</i>	National Sanitation Foundation
<i>Post-consumer recycled content:</i>	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).
<i>Pre-consumer recycled content:</i>	Recycled content comes from process waste that is used to make a different product.
<i>Recycled fibres:</i>	Fibres collected from the conversion and consumer stages. Purchased broke and broke from own production is defined as new fibre (if the raw material is new fibre) and as recycled fibre (if the raw material is recycled).
<i>Third-party:</i>	An entity without any financial interest or stake in the sales of the product or service being evaluated or other conflict of interest
<i>VOC:</i>	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.
<i>Wallpaper:</i>	Finishing materials using paper as base material and being pasted on walls or ceilings, excluding wall blanket and other similar wall hanging.
<i>Water soluble ink:</i>	Printing ink that uses water as solvent, and its volatile organic contents do not exceed 5% of the total mass of the ink.

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 on the product packaging, catalogue and/or company website for compliance:

- Basic product specifications
- Country of origin
- Installation method
- Instructions for correct use and storage to maximize the lifetime of the product
- Methods of cleaning application equipment
- Possible toxicity or health hazards imposed by the chemical components

Verification

Documentation related to the product labels, care instructions and other information provided with the product, material safety data sheets (MSDS), web pages and any other information shall be freely available to customers or the public.

4.2 CARBON

4.2.1 CFP quantification/ EPD Report – 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 15 Basic Points under this section.

4.3.1.1 Raw Material – Core Criteria

Requirements

15 Basic Points for demonstrating that the product with more than 10% (by weight) of paper, fabric and plastic shall meet the following minimum requirements:

Paper

Either one of the requirements (recycled content or sustainable sources) shall be fulfilled:

- \geq 20% Recycled contents *OR*
- \geq 50% raw materials from sustainable sources with certification, e.g. Chain of Custody Certification of Forest Stewardship (FSC); cradle-to-cradle certification, etc.

Fabric / Plastic

- \geq 20% Recycled contents

Verification

Documentation including but not limited to product catalogue, MSDS, written declaration, and certification of raw 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 recycling 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 certificates 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, CO₂ 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 ISO14001 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 15 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 that the following substances in the products shall be less than the below limits (% by weight of the product):

- Chlorofluorocarbons (CFCs): 0.1%;
- Chlorophenols: 20 µg/kg of fibre in textile materials;
- Extractable organic halogens (EOX): 3 mg/kg fibre in textile materials; and
- Release of vinyl chloride monomer: 1 mg/kg.

AND

The following substances shall not be added in the manufacturing process:

- Sodium hexafluorosilicate;
- N-(a-(1-nitroethyl)benzyl)-ethylene diamine
- Mixture of tris-(hydroxymethyl)-nitromethane, 5-chloro-2-methyl-4-
- Isothiazoline-3-on and 2-methyl-4-isothiazoline-3-on
- Tetramethylthiuram disulphide
- Chemicals for bleaching including chlorine, halogenated chemicals or hardly biodegradable complexing agents, such as ethylenediaminetetraacetic acid (EDTA) and diethylenetriaminepentaacetic acid (DTPA)

AND

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.

Verification

Laboratory test report(s) or self-declaration letter.

4.4.3.2 Heavy Metals – Core Criteria

Requirements

10 Basic Points for demonstrating that the heavy metals in the products shall be less than the following limits.

¹ [Agents Classified by the IARC Monographs, Volumes 1–137 – IARC Monographs on the Identification of Carcinogenic Hazards to Humans](#)

Table 2: The limits for heavy metals

Heavy Metal	Limits (mg/kg)
Arsenic	25
Barium	500
Cadmium	25
Chromium	60
Lead	90
Mercury	20

Verification

Laboratory test report(s). Test(s) shall be complied according to the National and International test methods.

4.4.3.3 Plasticisers – Non-core Criteria

Requirements

5 Bonus Points for concentration of phthalate in the product below 0.1% by weight of the product. The limited phthalates including the following types:

- Bis(2-ethylhexyl)phthalate (DEHP)
- Dibutyl phthalate (DBP)
- benzylbutylphthalate (BBP)
- Diisononylphthalate (DINP)
- Diisodecylphthalate (DIDP)
- Di-n-octylphthalate (DNOP)

Verification

Laboratory test report(s). Test report(s) shall be compiled according to the National and International test methods, including but not limited to Standard Operating Procedures for Determination of Phthalates (CPSC-CH-C1001-09.3)

4.4.3.4 Printing Ink – Non-core Criteria

Requirements

5 Bonus points for using water soluble printing ink for producing wallpaper (if applicable).

Verification

Laboratory test report(s), MSDS and any relevant production documentation

4.4.4 Volatile Organic Compounds (VOC)

The Applicant is required to achieve 10 Basic Points under this section.

4.4.4.1 Formaldehyde – Core Criteria

Requirements

5 Basic points for demonstrating that the finished wall covering product shall not exceed limit on formaldehyde content < 0.05 ppm.

Products should be tested including but not limited to ASTM D 5116-10: Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials / Products or the California Department of Public Health (CDPH) standard method.

Verification

Laboratory test report(s)

4.4.4.2 VOC Content – Core Criteria

Requirements

5 Basic points for demonstrating that the finished wall covering product shall not exceed emission limit on Total volatile organic compounds (VOCs) < 0.5 mg/m³.

Products should be tested including but not limited to ASTM D 5116-10: Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials / Products or the California Department of Public Health (CDPH) standard method.

Verification

Laboratory test report(s)

4.5 PERFORMANCE

4.5.1 Product Life

The Applicant is required to achieve 10 Basic Points under this section.

4.5.1.1 Serviceability – Core Criteria

Requirements

10 Basic Points for demonstrating the product durability and functionality through at least FOUR testing items which may include but not limited to the followings:

- Abrasion Resistance
- Washability
- Stain Resistance
- Colourfastness
- Fire Resistance
- Impact Resistance

- Tensile
- Moisture Resistance
- Mildew and Fungal Resistance
- Dimensional Stability

Table 3: Standards for Wall Covering

Testing items	Standards
Abrasion Resistance	ASTM D4966, GB/T 1768, GB/T 35611-2017
Washability	ASTM D4828, GB/T 9780, GB/T 35611-2017
Stain Resistance	ASTM D6578, GB/T 18885, GB/T 35611-2017
Colorfastness	ASTM D1148, GB/T 8427, GB/T 251, GB/T 35611-2017
Fire Resistance	ASTM E84, GB 8624, GB/T 35611-2017
Impact Resistance	ASTM D5420, GB/T 1732, GB/T 35611-2017
Tensile	ASTM D5034, GB/T 3923.1, GB/T 35611-2017
Moisture Resistance	ASTM D2247, GB/T 35611-2017
Mildew and Fungal Resistance	ASTM G21, GB/T 1741, GB/T 35611-2017
Dimensional Stability	ISO 10581, GB/T 35611-2017

Verification

Documentation including but not limit to laboratory test report(s) for all relevant quality and performance tests that related to the label and relevant information.

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.

- Implementing technologies that significantly reduce resource consumption across various aspects.

- Adopting intelligent production methods that leverage automation, data analytics, and innovative design techniques.

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 4: 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]	15		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	-	
		Plasticisers	-	+5	
		Printing Ink	-	+5	
	Volatile Organic Compounds (VOC)	Formaldehyde [CORE]	5	-	
		VOC Content [CORE]	5	-	HWB 8
	Performance	Product Life	Serviceability [CORE]	10	-
InnoSmart	Innovations & Additions		-	+5	IA
Total:			50	+75	

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