



Product: Demountable Partitions

Preamble

Pursuant to paragraph 54 (1)(b) of the *Canadian Environmental Protection Act, 1999*, the Minister of the Environment is pleased to publish the following national guideline on **demountable partitions** under the auspices of the Environmental Choice^M Program.

The Environmental Choice Program is designed to support a continuing effort to improve and/or maintain environmental quality by reducing energy and materials consumption and by minimizing the impacts of pollution generated by the production, use and disposal of goods and services available to Canadians.

Demountable partitions are fully or partially prefabricated gypsum board-based units whose primary functions are to restrict vision, sound, and passage.

The main environmental impacts of the production and use of demountable partitions are resource consumption, emissions of volatile organic compounds (VOCs), and disposal. When released, VOCs may affect indoor air quality or may react with nitrogen oxides in the presence of sunlight to produce ground level ozone and photochemical smog.

Based on a review of currently available life cycle information, the product category requirements will produce an environmental benefit through **resource conservation, a reduction in disposal, and a reduction in VOC emissions.**

Life cycle review is an ongoing process. As information and technology change, the product category requirements will be reviewed and possibly amended.

Environment Canada anticipates that manufacturers or importers of **demountable partitions** which conform to this guideline will apply to the Environmental Choice Program for verification and subsequent authority to label the qualifying products with the Environmental Choice EcoLogo^M.

Notice

Any reference to a standard means to the latest edition of that standard.

The Environmental Choice Program reserves the right to accept equivalent test data for the test methods specified in this guideline.

Notice of Intent

It is the intent of the Environmental Choice Program to consider incorporating the following requirements when the guideline is next reviewed:

- a minimum content of post-consumer material or other recycled materials in textile coverings;
- the use of high-efficiency surface coating application systems;
- programs for reuse of post-consumer demountable partitions in other applications, after the useful life of the partition.

Interpretation

1. In the following guideline:

“aromatic solvent” means any organic solvent that has a benzene ring in its molecular structure;

“CFC” means chlorofluorocarbon;

“consumer” means a household, commercial establishment or institutional facility;

“demountable partition” means a fully or partially prefabricated gypsum board based unit whose primary functions are to restrict vision, sound, and passage. It can be attached to both flooring and ceiling assemblies and can be completely demounted and re-erected using all original components. It does not necessarily have the capability to support furniture systems;

“HCFC” means hydrochlorofluorocarbons;

“halogenated solvent” means any organic solvent containing halogens including fluorine, chlorine, bromine, and iodine;

“OSHA” means United States Occupational Safety and Health Administration;

“post-consumer material” means a product which has served its end-use at the consumer level, has been discarded by the consumer, and would, unless diverted, enter the waste stream;

“pre-consumer material” means materials generated by an industrial process that would, unless diverted, enter the waste stream. This includes, but is not limited to, damaged or defective materials, and overstock or obsolete inventories from manufacturers, distributors, and wholesalers;

“recycled material” means post-consumer material and pre-consumer material. It does not include by-products of an industrial process that can be, and regularly are, used in either the same process, or in a different process, except that proportion which originated as post-consumer material and pre-consumer material;

“surface coating” means a paint, stain, or varnish, applied in liquid or powder form, used to coat surfaces;

“volatile organic compound” or “VOC” in ambient air means any organic compound which participates in atmospheric photochemical reactions. It excludes those organic compounds which the ECP designates as having negligible photochemical reactivity. VOC in indoor air refers to any volatile carbon containing compound, excluding carbon dioxide (CO₂) and carbon monoxide (CO), that may or may not participate in photochemical reactions; and

“WHMIS” means Workplace Hazardous Materials Information System.

Category Definition

2. This category includes all ***demountable partitions***.

General Requirements

3. To be authorized to carry the EcoLogo ***demountable partitions*** must:
 - (a) meet or exceed all applicable governmental and industrial safety and performance standards; and
 - (b) be manufactured and transported in such a manner that all steps of the process, including the disposal of waste products arising therefrom, will meet the requirements of all applicable governmental acts, by laws and regulations including, for facilities located in Canada, the *Fisheries Act* and the *Canadian Environmental Protection Act* (CEPA).

Product Specific Requirements

4. To be authorized to carry the EcoLogo ***demountable partitions*** must:
 - (a) be accompanied by readily available information that identifies and actively promotes options for the reuse of demountable partitions. Customers may be informed of reuse options through means such as: sales literature, product catalogues, tagging of product, packaging inserts, customer information kits, or electronic media;
 - (b) be accompanied by information that identifies how the product may be disassembled in order to permit recycling;
 - (c) not emit VOCs which will result in an indoor air concentration of greater than 0.5 mg/m³ when tested in accordance with the State of Washington *Environmental Chamber Protocol for the Measurement of Pollutant Outgassing from Office Furniture* based on ASTM D5116-90 *Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products*, or through extrapolation from the above test results for components or similar products using computer modelling;

- (d) not emit formaldehyde which will result in an indoor air concentration of greater than 0.5 mg/m³, when tested in accordance with the State of Washington *Environmental Chamber Protocol for the Measurement of Pollutant Outgassing from Office Furniture* as based on ASTM D5116-90 *Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products*, or through extrapolation from the above test results for components or similar products using computer modelling;
- (e) be manufactured in such a manner that liquid surface coatings are stored in controlled storage areas, as per WHMIS or OSHA requirements;
- (f) not contain plastic foam that is manufactured or formulated using CFCs or HCFCs;
- (g) where lead shielding is necessary for medical applications, incorporate only completely sealed lead panels as a backing; and
- (h) be manufactured at a facility that has carried out a solid waste audit, prepared a waste reduction action plan, and instituted a means to track progress towards waste reduction and diversion from disposal of materials such as metals, plastics, fabrics, wood, leather, fibreglass, and glass. Note: The above requirement applies to the manufacturing process waste as a minimum.

Verification

- 5. To verify a claim that a product meets the criteria listed in the guideline, the Environmental Choice Program will require access, as is its normal practice, to relevant quality control and production records and the right of access to production facilities on an announced basis.
- 6. Compliance with section 3(b) shall be attested to by a signed statement of the Chief Executive Officer or the equivalent officer of the manufacturer. The Environmental Choice Program shall be advised in writing immediately by the licensee of any noncompliance which may occur during the term of the license. On the occurrence of any noncompliance, the license may be suspended or terminated as stipulated in the license agreement. .

Conditions for EcoLogo Use

- 7. The EcoLogo may appear on wholesale or retail packaging, or on the product itself, provided that the product meets the requirements in this guideline.
- 8. It is recommended that a criteria statement appear with the EcoLogo whenever the EcoLogo is used in association with the **demountable partitions**. The intent of this statement is to provide clarification as to why the product was certified and to indicate constraints to which the certification is limited. This is to ensure no ambiguity over, or misrepresentation of, the reason(s) for certification.

ECP suggested criteria statement wording for this product type is “*Demountable Partition*”. The licensee may propose other wording for the criteria statement, but any such proposed wording must be approved by the Environmental Choice Program.

9. All licensees and authorized users must comply with the Environmental Choice Program's *Guide to Proper Use of the EcoLogo^M* regarding the format and usage of the EcoLogo.
10. Any accompanying advertising must conform with the relevant requirements stipulated in this guideline, the license agreement and the Environmental Choice Program's *Guide to Proper Use of the EcoLogo^M*.

***For additional copies of this guideline or for more information about the Environmental Choice Program, please contact: TerraChoice Environmental Services Inc.,
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EcoLogo^M Program Interpretation Document

Equivalent Testing Methodologies for VOC / Formaldehyde Emissions



Interpretation:

The EcoLogo^M certification criteria documents for demountable partitions (CCD-032) and office furniture and panel systems (CCD-033) include limits on volatile organic compounds and formaldehyde emissions concentrations when tested in accordance with the State of Washington “*Environmental Chamber Protocol for the Measurement of Pollutant Outgassing from Office Furniture*” based on ASTM D5116-90 “*Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor Materials/Products*”, or through extrapolation from the above test results for components or similar products using computer modeling.

ASTM D6670-01, “*Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products*” is an alternative method to the State of Washington protocol based on ASTM D5116-90 that can be used to provide results acceptable for EcoLogo^M evaluation.

Additionally, any reference to ASTM D5116-90 should be replaced with ASTM D5116-06.

Basis for Interpretation:

EcoLogo^M reserves the right to accept test data for equivalent test methods to those specified in a particular criteria document. Equivalency is determined through a review and comparison of:

- the methodology and procedures themselves;
- the reliability, repeatability and reproducibility of the methods;
- the materials, equipment and test conditions required;
- the requirements for reporting of data and test results; and
- the consideration of peer and expert review of the methodologies.

Small chambers have limitations in that they test only samples of larger materials and are not necessarily applicable for testing complete assemblages (such as furniture). Large (or full-scale) chambers may be more appropriate for many of these applications. Upon initial release of CCD-032 and CCD-033, there was no ANSI American National Standard available for large chamber testing of furniture. Therefore, these criteria documents cited the State of Washington Protocol in conjunction with ASTM D5116-90.

ASTM D6670-01 and the State of Washington Environmental Chamber Protocol are both full-scale chamber testing methodologies used for measuring the level of volatile organic compound and other chemical compound emissions. In addition, ASTM D6670 and ASTM D5116-06 both describe the basis for the testing, focus on chamber construction and materials, and refer to mass balance principles.

Note that the EcoLogo^M requirements for volatile organic compound and formaldehyde emissions concentrations remain the same.

Affected EcoLogo^M Criteria Documents:

CCD-032 “Demountable Partitions”; and
CCD-033 “Office Furniture and Panel System”

EcoLogo^M Program Interpretation Document

Equivalent Testing Methodologies
for VOC / Formaldehyde Emissions



Additional Notes:

Copies of the above certification criteria documents can be found at www.ecologo.org

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