

Environmental Choice^M Program

CERTIFICATION CRITERIA DOCUMENT

CCD-020



Product: Gypsum Wallboard

Introduction

Environment Canada's Environmental Choice^M Program is pleased to publish the following certification criteria document for *gypsum wallboard*.

The Environmental Choice^M 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.

Gypsum wallboard is a construction material consisting of a core of gypsum (calcium sulphate, CaSO₄) wrapped in paper and produced in large sheets that can be attached to wall studs. Also known as *drywall*, it is typically used to create smooth flat walls and/or ceiling surfaces and to divide indoor spaces.

It is estimated that over 30 million tons of wallboard are manufactured annually in North America, and that drywall wastes represent up to 15 per cent of construction and demolition waste. Although gypsum wallboard is a relatively inert material, under certain conditions it can become an environmental health concern: anaerobic decay (e.g. in a landfill) of calcium sulphate may result in the generation of hydrogen sulfide gas (H₂S), a toxic substance.

Based on a review of currently available life cycle information, the product category requirements will produce an environmental benefit through better use of resources, reduction in wastes and reduction in air and water pollutant emissions.

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

Environment Canada anticipates that manufacturers or distributors of architectural surface coatings, which conform to this criteria document, will apply to the Environmental Choice^M Program for verification and subsequent authority to label the qualifying products with the EcoLogo^M.

Notice

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

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

Interpretation

1. In the following guideline:

"backing material" means the sheets that cover the gypsum core in gypsum wallboard. This may consist of paper, vinyl, water-resistant material and fiber-reinforced material;

"consumer" means the household, commercial establishment or institutional facility where the gypsum wallboard will be used;

"FGD gypsum" means gypsum derived from the process of forced oxidation of flue gas desulphurization (FGD);

"fiber-reinforced gypsum board" means a gypsum wallboard composed of fibers dispersed throughout the board;

"gypsum" means hydrous calcium sulphate ($\text{CaSO}_4 \bullet 2\text{H}_2\text{O}$);

"gypsum wallboard" means a gypsum-based core material sold in the form of sheets for the purpose of finishing the interior surfaces of walls prior to the application of paint, wallpaper, or other coating. It includes paper-faced, vinyl-faced, water-resistant and fiber-reinforced gypsum boards;

"gypsum wallboard construction waste" means gypsum wallboard generated during the process of finishing interior wall surfaces. It includes cuttings generated at construction and renovation sites, but excludes gypsum wallboard demolition waste;

"gypsum wallboard demolition waste" means wallboard which has been treated with material such as paint, adhesives and joint compounds or has been contaminated by mold or other substances. This material has been generated during the demolition of previously finished interior spaces;

"post-consumer material" means materials that have served their end-use at the consumer level, have been discarded by consumers and would, unless diverted, enter the waste stream;

"post-industrial material" or "pre-consumer material" means materials generated by an industrial process that would, unless diverted, enter the waste stream. This category excludes reutilization of materials such as rework or scrap generated in a process and capable of being reclaimed within the same process that generated it. This includes, but is not limited to, returns of material from the distribution chain, and obsolete inventories from retailers, manufacturers or converters. For the purpose of this Certification Criteria Document, FGD gypsum is considered a post-industrial material;

"recycled material" means gypsum wallboard construction waste material, post-consumer material and post-industrial 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 gypsum wallboard construction waste, post-industrial material and post-consumer material; and

"rolling average" means a technique for smoothing data, in which the mean of the previous n data points is calculated; n refers to the time period specified for the rolling average (e.g. 3 months). For example, to calculate the rolling average for a 3 month period at the end of September the average for the data in July, August and September is used; the rolling average for October would use the data for August, September and October, and successively.

Category Definition

2. This category includes all **gypsum wallboard**.

General Requirements

3. To be authorized to carry the EcoLogo^M **gypsum wallboard** 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^M the **gypsum wallboard** must:
 - (a) comply with the requirements of CAN/CSA-A82.27 *Gypsum Board Products*; Fiber-reinforced gypsum board must comply with ASTM C1278 *Standard Specification for Fiber-Reinforced Gypsum Panels*;
 - (b) contain, when calculated on a three-month rolling average, meet one of the following
 - (i) a minimum of 10% by weight of post-consumer recycled material in the core of the finished product; or
 - (ii) a minimum of 20% by weight of post-industrial recycled material and 5% post-consumer recycled material by weight in the core; or
 - (iii) a minimum of 50% by weight of post-industrial recycled material in the core;
 - (c) declare, on the product label, the type and percentage of recycled material contained in the finished product (i.e. post-consumer, post-industrial, or a combination of both)
 - (d) provide detailed instructions concerning proper storage, handling and installation procedures;
 - (e) use 100% recycled paper for the backing material in the wallboard; and
 - (f) if denominated as fiber-reinforced gypsum board, be manufactured using fibers that have been derived from paper, paperboard stock, wood and/or other organic material

Verification

5. To verify a claim that a product meets the criteria listed in the guideline, the Environmental Choice^M 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^M Program shall be advised in writing immediately by the licensee of any non-compliance which may occur during the term of the license. On the occurrence of any non-compliance, the license may be suspended or terminated as stipulated in the license agreement. In the event of a dispute related to the suspension or termination of the license, the license agreement provides for arbitration.

Conditions for EcoLogo^M Use

7. The EcoLogo^M 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^M whenever the EcoLogo^M is used in association with the *gypsum wallboard*. 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 “*Gypsum Wallboard*”. The licensee may propose other wording for the criteria statement, but any such proposed wording must be approved by the Environmental Choice^M Program.

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

***For additional copies of this guideline or for more information about the Environmental Choice^M Program, please contact:
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