

Hong Kong Green Label Scheme
Product Environmental Criteria for
Carpeting Modular (GL-008-005)



BACKGROUND

The Hong Kong Green Label Scheme (HKGLS) is an independent and voluntary scheme, which aims to identify products that are, based on life cycle analysis consideration, more environmentally preferable than other similar products with the same function. The Scheme is organized by the Green Council (GC) with contributions from the HKGLS Advisory Committee and a number of supporting organizations.

The prime objectives of HKGLS are:

- For Consumers: assist in making purchases of products that are less harmful to the environment;
- For Industry: stimulate development and production of environmentally preferable alternatives.

This specification sets out the requirements that “carpeting modular” products will be required to meet in order to be licensed to use the HKGLS label. The requirements include product performance and environmental criteria. The specification also defines the testing needed to verify conformance with some of the requirements.

POTENTIAL ENVIRONMENTAL IMPACTS

Major environmental impacts of carpets relate to emissions from product, toxicity of materials used in the production and waste generation which all need to be properly addressed.

Carpet has been identified as a contributor to indoor air pollution, particularly from adhesives used for installation. The chemical makeup of the carpet assembly can release Volatile Organic Compounds (VOCs) for 48 to 72 hours after installation, while adhesives, seam sealants, and carpet padding all contribute to VOC off gassing. Adhesives are generally the largest source of VOCs.

In carpet production toxic dyes may be used to produce the colors, which sometimes end up in streams. Topically (i.e. involving local application) applied mold-inhibiting chemicals with potential harm from their use are also a concern.

Carpet also poses waste management problems because old carpets have been typically disposed of in landfills, taking up valuable space due to its bulk, and wasting resources that could be reused or recycled. The USEPA has suggested that carpets take 50 years to decompose. Therefore the percentage of recycled content of carpets is an important consideration.

However, it is a common practice now to take back used modular carpet tiles and refurbish them in a process involving cleaning and redyeing of the carpets, restoring them to “like new” condition. These, in turn, can be recycled.

Hong Kong Green Label Scheme
Product Environmental Criteria for
Carpeting Modular (GL-008-005)



LABEL OBJECTIVE

The aim of the environmental criteria developed for “carpeting modular” is to:

- Reduce the release of harmful emissions, including Volatile Organic Compounds (VOCs) arising from the carpets and adhesives.
- Reduce the use of toxic substances including dyes and mold-inhibitors during the production of carpets.
- Minimize waste production by requiring recyclability.

PRODUCT DEFINITION

This document and all product environmental criteria therein apply to all “carpeting modular”.

PRODUCT CRITERIA

The product performance and environmental criteria for the product category of “carpeting modular” (GL-008-005) under the

Hong Kong Green Label Scheme (HKGLS) are set out in this criteria document in the ensuing table.

Criteria

Verification Method

PRODUCT PERFORMANCE CRITERIA

1. The product shall meet the performance requirements of acceptable standards, including stain resistance, resistance to water, embedded dirt removal.

Supporting documentation shall be submitted for review

PRODUCT ENVIRONMENTAL CRITERIA

2. Recycled content of backing – A post-consumer or post-industrial recycled content of at least 5% shall be included.

The applicant shall provide a *declaration* of conformity of the product with the requirement.

3. Emissions of Total Volatile Organic Compounds (TVOCs) shall not exceed 0.5 mg/m² per hour.

TVOC emission rates of the product shall be tested using ASTM-D5116 or equivalent method.

4. The product shall be sold as removable tiles *preferably* using a peel and stick water-based adhesive.

Supporting documentation shall be submitted for review.

Hong Kong Green Label Scheme
Product Environmental Criteria for
Carpeting Modular (GL-008-005)



-
- | | |
|--|--|
| 5. The product shall not be manufactured with topically applied biological inhibitors. | The applicant shall provide a <i>declaration</i> of conformity of the product with the requirements. |
| 6. Dyeing process – The face fiber shall <i>preferably</i> be solution-dyed. | Supporting documentation shall be submitted for review. |
| 7. Reusability/Recyclability – The product shall be recyclable into either new carpet or other products, or shall be capable of being refurbished. | Supporting documentation shall be submitted for review. |