

# ECoverings® from a LEED Perspective

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## Introduction

Coverings ETC has been a member of the United States Green Building Council (USGBC) since 2001 and is committed to manufacturing **Future Friendly™** hard surface design finishes.

The ECOVERINGS® collection offers green design solutions as a service – to our environment and to our clients. By using recycled products we can help to save trees, reduce landfill and lessen greenhouse emissions. Hard surface finishes traditionally have advantages in longer life cycles, with less maintenance that make them a life cycle cost effective selection.

The ECOVERINGS® collection consists of naturally occurring, reclaimed, reused, recycled or recyclable materials, which aside from their practical applications and contemporary design appeal, are moisture, mold, and mildew resistant and contain low or no off-gassing, and less energy is potentially required for illumination when light colored flooring and countertops (low albedo) are specified and modeled. ECOVERINGS® materials are substantially stronger than conventional materials and provide high performance for energy efficient designs that will save energy costs and increase resale value. By using “future friendly” materials we help to conserve natural resources and create an improved environment.

The Coverings ETC **Future Friendly™ ECOVERINGS®** collections profiled in this review include:

### BIO-GLASS®

Ecologically intelligent design - slabs made of recycled and recyclable glass. Cradle-to-Cradle Certified, NSF Certified, Material ConneXion and GreenSpec listed. 100% post-consumer recycled content.

### ECO-CEM®

Concrete mix sheets with wood pulp to provide a contemporary, yet warm industrial look. Material ConneXion listed. Contains both pos- consumer and pre-consumer recycled content.

### ECO-GRES™

Through body, unglazed porcelain sheets, tiles and mosaics. Highly sustainable, easy to install and maintain. Contains pre-consumer recycled content.

### ECO-TERR®

Pre-cast terrazzo tiles and slabs offering timeless beauty. Made of naturally occurring marble and granite aggregates with a cementitious binder. NSF listed. Contains pre-consumer recycled content.

**ECOVERINGS®** floor and wall panels are reproduced by means of hi-tech industrial processes making it possible to create natural composites with superior features, while maintaining the allure of natural beauty and the practicality of environmental conservation. The general principles of bio-architecture, as defined in this paper, take energy savings, sustainability, and concern for the inhabitants into consideration and is self reported information as best can be determined at this time.

## Overview

Coverings ETC recognizes that no product is LEED certified and submits this report based on the understanding that each project is situational and that ECOVERINGS® materials will vary in point contributions from project to project. This report is suggesting potential areas of contribution to earning LEED 2.2 points and credits.

<b>LEED-NC</b>	MR Credit 1.3	Building Reuse 50 % Interior	1 Point
	MR Credit 2.1	Construction Waste Mgt 50%	1 Point
	MR Credit 2.2	Construction Waste Mgt 75%	1 Point
	MR Credit 3.1	Materials Reuse 5%	1 Point
	MR Credit 3.2	Materials Reuse 10%	1 Point
	MR Credit 4.1	Recycled Content 10%	1 Point
	MR Credit 4.2	Recycled Content 20%	1 Point
	EA Credit 4.1	Low Emitting Materials – Adhesives & Sealants	1 Point
	ID Credit	Innovative Design	1-4 Points
<b>LEED-CI</b>	MR Credit 1.2	Building Reuse	1 Point
	MR Credit 1.3	Building Reuse	1 Point
	MR Credit 3.1 – 3.2	Materials Reuse 5% /10%	1-2 Points
<b>LEED-EB</b>	MR Credit 1.1 & 1.2	Const. Waste Mgt	1-2 Points
	MR Credit 2.1 – 2.5	Alternate Materials	1-5 Points
	MR Credit 3.1 & 3.2	IAQ Compliant Products	1-2 Points

## LEED-NC Version 2.2

### Materials and Resources

MR Credit 1.3: Building Reuse: Maintain 50% of Interior Non-Structural Elements 1 Point

**Intent**

Extend the life cycle of existing building stock, conserve resources, and retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

**Requirements**

Use existing non-shell elements (interior walls, doors, floor coverings, and ceiling systems) in at least 50% (by area) of the completed building (including additions). If the project includes an addition to an existing building, this credit is not applicable if the square footage of the addition is more than 2 times the square footage of the existing building.

**ECOverings®** products may contribute to this credit where interior **ECOverings®** tile utilized on floors, walls or counter tops is maintained as structure is renovated. The design versatility of porcelain tile has extended life properties that make this an attractive incentive for adaptability in projects incorporating extended life design strategies.

**LEED-CI Version 2.0****1 Point****MR Credit 1.2: Building Reuse****Maintain 40% of Interior Non-Structural Components****Intent**

Extend the life cycle of the existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impact of new buildings as they relate to materials manufacturing and transport.

**Requirements**

Maintain at least 40% by area of the existing non-shell, non-structure components (walls, flooring, ceilings).

**ECOverings®** products may contribute to this credit where interior **ECOverings®** tile utilized on floors, walls or counter tops is maintained as structure is renovated. The design versatility of porcelain tile has extended life properties that make this an attractive incentive for adaptability in projects incorporating extended life design strategies.

**LEED-CI Version 2.0****MR Credit 1.3: Building Reuse****1 Point in addition to MR Credit 1.2****Maintain 60% of Interior Non-Structural Components****Requirements**

Maintain at least 60% by area of the existing non-shell, non-structure components (walls, flooring, ceilings).

**ECOverings®** products may contribute to this credit where interior **ECOverings®** tile utilized on floors, walls or counter tops is maintained as structure is renovated. The design versatility of porcelain tile has extended life properties that make this an attractive incentive for adaptability in projects incorporating extended life design strategies.

**MR Credit 3.1: Materials Reuse - 5%****1 Point**

NOTE: Also see **LEED-CI: MR Resource Reuse Credit 3.1 5%; Credit 3.2 10%**

**Intent**

Reuse building materials and products in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.

**Requirements**

Use salvaged, refurbished or reused materials such that the sum of these materials constitutes at least 5% based on cost, of the total value of materials on the project.

**ECOverings®** may contribute to this credit where interior **ECOverings®** tile utilized as counter surface that could be salvaged for use in another project.

**MR Credit 2.1: Construction Waste Management: Divert 50%****From Disposal****1 Point****Intent**

Divert construction, demolition and land-clearing debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

**Requirements**

Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or co-mingled. Calculations can be done by weight or volume, but must be consistent throughout.

**ECOverings®** products can be recycled through a construction waste program. It is unlikely any significant weight would be contributed towards this credit but can make a contribution based on packaging and broken or discarded cut pieces.

**MR Credit 2.2: Construction Waste Management: Divert 75% from Disposal  
1 Point in addition to MR Credit 2.1**

**Intent**

Divert construction and demolition debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

**Requirements**

Recycle and/or salvage an additional 25% beyond MR Credit 2.1 (75% total) of non-hazardous construction and demolition debris. Excavated soil and land-clearing debris do not contribute to this credit. Calculations can be done by weight or volume, but must be consistent throughout.

**ECOverings®** products can be recycled through a construction waste program. It is unlikely any significant weight would be contributed towards this credit but can make a contribution based on packaging and broken or discarded cut pieces.

**LEED-EB Version 2.0**

**MR Credit 1.1 & 1.2: Construction, Demolition and Renovation Waste Management (1–2 Points)**

**Intent**

Divert construction, demolition and land-clearing debris from landfill and incineration disposal. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

**Requirements**

Develop and implement a Waste Management Policy covering any future building retrofit, renovation or modification on the site. Quantify diversions of construction, demolition and land-clearing debris from landfill and incineration disposal by weight or volume.

**MR Credit 1.1:** Divert at least 50% of construction, demolition and land-clearing waste from landfill and incineration disposal. (1 point)

**MR Credit 1.2:** Divert at least 75% of construction, demolition and land-clearing waste from landfill and incineration disposal. (1 additional point)

**ECOverings®** products can be recycled through a construction waste program. It is unlikely any significant weight would be contributed towards this credit but can make a contribution based on packaging and broken or discarded cut pieces.

**Recycled Content:** As listed on product labels, meaning the product contains some percentage of post-consumer and/or pre-consumer recycled materials. This differs from “recyclable,” which means that the material could possibly be recycled through a waste management program.

**MR Credit 2.1–2.5: Optimize Use of Alternative Materials (1–5 Points)**

**Intent**

Reduce the environmental impacts of the materials acquired for use in the operations, maintenance, and upgrades of buildings.

**Requirements**

Maintain a sustainable purchasing program covering at least office paper, office equipment, furniture, furnishings and building materials for use in the building and on the site. A template calculator will be provided for LEED-EB MR Credit 2.1–2.5. One point (up to a maximum of five) will be awarded for each 10% of total purchases over the performance period (on a dollar basis) that may achieve at least one of the following sustainability criteria:

- Contains at least 70% salvaged material from off site or outside the organization.
- Contains at least 70% salvaged from on site through an internal organization materials & equipment reuse program.
- Contains at least 10% post-consumer or 20% post-industrial material.
- Contains at least 50% rapidly renewable materials.
- Is Forest Stewardship Council (FSC) certified wood.
- Contains at least 50% materials harvested and processed or extracted and processed within 500 miles of the project.

Note: In calculating the percentage of purchases over the performance period conforming to the requirements, each purchase can only receive credit against a single requirement (i.e., a purchase that contains both 10% post-consumer recycled content and is harvested within 500 miles of the project counts only once in this calculation).

**ECOvering®** products may contribute to this credit by recycled content and/or salvaged materials such as counter tops with **ECOverings** products.

**LEED-EB Version 2.0**

**MR Credit 3.1 & 3.2: Optimize Use of IAQ Compliant Products (2 Points)**

**Intent**

Reduce the indoor air quality (IAQ) impacts of the materials acquired for use in the operation, maintenance and upgrades of buildings.

**Requirements**

Optimize use of air quality compliant materials inside the building to reduce the emissions from materials used in the building. Points are awarded for the existence of product purchasing policies for the building and site addressing the requirements of this credit and documentation of purchasing during the performance period in conformance with those policies, as described below. Subsequent re-certification is tied to both policies and purchasing performance, as described below. At a minimum, these policies must include the following product groups: paint and coatings, adhesives, sealants, carpet, composite panels, and agrifiber products. The building materials covered include any building materials covered by a.-e (See Reference guide available from the USGBC LEED-EB program) that are used for improvements, including upgrades, retrofits, renovations or modifications, inside the building.

One point shall be awarded, up to a maximum of 2 points, for each 45% of annual purchases calculated on a cost basis that conform with one of the following sustainability criteria: 1) Adhesives and sealants with a VOC content less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168, or 2) sealants used as fillers that meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51.

**ECOverings®** products are inert and do not contribute to VOC's. Specify tile adhesives in mastic-set applications that meet the VOC limits and prohibited chemical limitations of the "Green Seal Environmental Standard for Certification of Commercial Adhesives" (GS-36), of Green Seal, Inc., Washington, DC. The VOC content of mortars or grouts for ceramic tile installations should not be in excess of 150 grams/liter, less water and less exempt compounds. See LEED requirements above.

**LEED-NC Version 2.2**

**MR Credit 4.1:** Recycled Content - 10% (post-consumer + 1/2 pre-consumer) 1 Point

NOTE: this credit also applies to LEED-EB

**Intent**

Increase demand for building products that incorporate recycled content materials, therefore reducing impacts resulting from extraction and processing of new virgin materials.

**Requirements**

Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 10% of the total value of the materials in the project.

The value of the recycled content portion of a material or furnishing shall be determined by dividing the weight of recycled content in the item by the total weight of all material in the item, then multiplying the resulting percentage by the total value of the item. Recycled content materials shall be defined in accordance with the International Organization of Standards document, *ISO 14021 - Environmental labels and declarations - Self-declared environmental claims (Type II environmental labeling)*.

**LEED-NC Version 2.2**

**MR Credit 4.2:** Recycled Content - 20% (post-consumer + 1/2 pre-consumer) 1 Point in addition to MR 4.1

NOTE: This credit also applies to LEED-EB

**Requirements**

Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the pre-consumer content constitutes at least 20% of the total value of the materials in the project.

**LEED-CI Version 2.0**

**MR Credit 4.1 Recycled Content – 10%** (post consumer + ½ pre-consumer) (1 point)

**Requirements**

Use materials, including furniture and furnishings, with recycled content such that the sum of post-consumer recycled content plus 1/2 (one-half) of the pre-consumer content constitutes 10% of the total value.

**MR Credit 4.1 Recycled Content – 20%** (post consumer + ½ pre-consumer) 1 point in addition to MR 4.1

**MR Credit 4.1 Requirements**

See above credit requirements.

See LEED-CI Version 2.0 Reference Guide for exact requirements and calculations.

**NOTE: Recycled content is typically determined by calculating the weight of the recycled material divided by the total weight of the product and expressed as a percentage by weight. (The recycled content "value" of a product as assessed under LEED is determined by multiplying the recycled content percentage and the cost of the product.)**

**EQ Credit 4.1: Low-Emitting Materials: Adhesives & Sealants** (1 Point)

**Intent**

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

**Requirements**

All adhesives and sealants used on the interior of the building (defined as inside of the weatherproofing system and applied on-site) shall comply with the requirements of the following reference standards:

- Adhesives, Sealants and Sealant Primers: South Coast Air Quality Management District (SCAQMD) Rule #1168. VOC limits correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005.

**ECOverings®** products should be installed with ceramic tile adhesives in compliance with the LEED criteria described above.

**ID Credits 1-4: Innovative & Design Process**

**1-4 Points**

**Intent**

To provide design teams and projects the opportunity to be awarded points for exceptional performance above the requirements set by the LEED Green Building Rating Systems and/or innovative performance in Green Building categories not specifically addressed by a LEED Green Building Rating System.

**Requirements**

In writing, identify the intent of the proposed innovation credit, the proposed requirement for compliance, the proposed submittals to demonstrate compliance, and the design approach (strategies) that might be used to meet the requirements.

**ECOverings® Potential LEED Contributions**

ECOverings® presents opportunities to contribute to earning innovative credits through designing spaces with the benefits of design flexibility, health attributes such as does tile does not promote mold growth when properly maintained, high durability and long life cycle, Low maintenance requirements, excellent material consider for IEQ sensitive projects.

Education programs on the manufacturing processes of unglazed porcelain tile and design possibilities provide many opportunities for innovative design.

***NOTE:** This evaluation is offered in good faith based on an independent LEED AP® reviewer's knowledge of the LEED rating system and intended design strategy. This product potentially contributes to earning points and credits for the credits listed in the evaluation. Verification of qualifying points and credits is achieved according to the LEED documentation reporting, calculation requirements and methods. LEED® is a registered trademark of the US Green Building Council.*

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