RETRO PLATE GREEN and sustainable

LEED v4, v4.1, v5
Product Contribution Guide

1. PRODUCT INFO

Product: **RetroPlate®**
Manufacturer: **Curecrete Distribution, Inc. – Springville, Utah, USA**
Application: **Concrete densification and polishing system for new and existing concrete slabs, producing a durable, exposed concrete finish without coatings or topical films.**

2. PURPOSE OF THIS DOCUMENT

This guide summarizes how RetroPlate can support project teams pursuing LEED® certification under current LEED frameworks (LEED v4, v4.1, and the emerging LEED v5 platform). It also highlights Curecrete's **Environmental Product Declaration (EPD)** and how it contributes to LEED credit pathways that emphasize product transparency, embodied carbon reporting, and life-cycle performance.

This document is a product-level resource only and does not guarantee the achievement of any LEED credits. All LEED decisions are made at the project level by GBCI / USGBC.

3. OVERVIEW OF RETROPLATE

RetroPlate is an inorganic, chemically reactive, water-based treatment for exposed concrete floors that virtually eliminates dust and significantly enhances surface hardness and density—allowing the concrete to be polished and refined into a long-lasting, low-maintenance finished floor without the need for applied coatings, coverings, or adhesives.

Curecrete has published an Environmental Product Declaration (EPD) that provides a third-party-verified, standardized assessment of the environmental impacts associated with its products. Where applicable under the project's LEED version, this EPD supports credit pathways focused on product transparency, life-cycle assessment (LCA), and embodied carbon evaluation.

Key sustainability attributes:

- Utilizes exposed concrete as the finished floor surface, eliminating the need for floor coverings and adhesives, coatings, or paint
- Permanently densifies concrete – no film, no topical resin
- Eliminates the need for floor coverings (carpet, vinyl, tile, etc.)
- Highly durable, designed to last the life of the slab
- EPD available to support LEED transparency and life-cycle impact credits

4. APPLICABILITY TO LEED RATING SYSTEMS

This contributor guide aligns with:

- LEED v4 / v4.1 BD+C & ID+C
- LEED v5 themes and impact areas (Decarbonization, Quality of Life, Ecological Conservation)

The document avoids outdated credit numbering and maps RetroPlate to the current LEED intent structure, including areas where the EPD provides direct value.

5. KEY SUSTAINABILITY ATTRIBUTES

LIFE-CYCLE & DURABILITY

- Enables reuse of existing structural concrete as the finished floor, eliminating additional finish materials and adhesives
- Reduces embodied carbon compared to multi-layer flooring systems
- Long-term durability may reduce material consumption over the building life cycle
- Performance characteristics can complement whole-building life-cycle assessments

LIFE-CYCLE TRANSPARENCY VIA CURECRETE'S EPD (NEW)

- Curecrete's published EPD provides standardized life-cycle environmental impact data (including global warming potential), supporting LEED credit pathways for:
    - Material Ingredients & Product Transparency (LEED v4/v4.1)
    - Embodied Carbon / Decarbonization Credits (LEED v5)
- The EPD supports informed comparison of flooring system impacts at the project level

INDOOR ENVIRONMENTAL QUALITY (IEQ)

- Zero-VOC formulation supports compliance with LEED's low-emitting materials criteria when supported by emissions or VOC documentation
- Supports low-emitting material strategies when supported by VOC or emissions documentation
- The polished, sealed concrete surface does not harbor dust, allergens, or mold
- No solvent-based odors, fumes, or off-gassing during normal use after cure

MATERIAL EFFICIENCY & WASTE REDUCTION

- Reuse of existing slabs aligns with LEED strategies for:
    - Material reuse
    - Construction waste minimization
    - Design for resource efficiency
- Reduces demolition and disposal associated with floor replacement
- Lowers long-term waste generation compared to short-lifecycle flooring systems

REGIONAL MANUFACTURING

- Product manufactured in Springville, Utah, USA
- Depending on project proximity and LEED version-specific definitions, this may support regional sourcing considerations

6. POTENTIAL LEED CONTRIBUTION PATHWAYS (INCLUDING EPD USE)

Contribution pathways depend on the project's LEED version, scope, and documentation approach.

DECARBONIZATION & LIFE-CYCLE PERFORMANCE

Use of EPD in LEED v4/v4.1

Curecrete's EPD may contribute to:

- LEED MR: Building Product Disclosure & Optimization (BPDO) – Environmental Product Declarations
    - RetroPlate may count as one contributing product toward disclosure thresholds (Option 1: Disclosure)

Relevance to LEED v5's Decarbonization Pathways

- LEED v5 places increased emphasis on embodied carbon data and product-level disclosures
- Curecrete's EPD provides verified LCA data suitable for inclusion in:
  - Embodied carbon calculations
  - Material selection modeling
  - Comparative flooring system assessments

SYSTEM-LEVEL EMBODIED CARBON REDUCTION

- RetroPlate enables exposed concrete floors, reducing reliance on higher-carbon finish materials
- Benefits may be captured at the system level within whole-building LCAs

QUALITY OF LIFE – INDOOR ENVIRONMENTAL QUALITY

- Low-emitting characteristics support IEQ credit pathways in LEED v4 / v4.1 and LEED v5 "Quality of Life" categories
- EPD transparency supports health-informed decision-making by providing full environmental impact data

ECOLOGICAL CONSERVATION & MATERIALS CIRCULARITY

- Slab reuse reduces raw material extraction and waste generation
- Long service life aligns with LEED's circularity principles
- EPD supports evaluation of maintaining versus replacing flooring systems over the building life cycle

7. Supporting Documentation Available from Curecrete

The following documentation may be provided upon request for LEED submittals:

- Environmental Product Declaration (EPD)
- Health Product Declaration (HPD)
- VOC content and/or emissions testing reports
- Product Technical Data Sheet (TDS)
- Safety Data Sheet (SDS)
- Installation & maintenance guidelines
- Regional manufacturing information

8. Important LEED Disclaimers

- LEED credits are awarded to projects, not products.
- Curecrete's EPD allows RetroPlate to serve as a qualifying disclosure product, but does not ensure credit achievement
- Project teams must confirm:
  - Applicable LEED version
  - Required documentation for each pursued credit
  - The role of RetroPlate within the overall materials strategy

Always reference USGBC for the most current LEED requirements.

9. Curecrete Contact Information

For LEED submittals, EPD requests, or technical questions:

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