

Green Building Program Documentation

KIREI – EchoPanel Acoustical Panels

Section 1: LEED BD+C v4.1 Credit Applicability and Language

Direct Credit Contributions:

Material and Resources (MR)

Credit: Environmental Product Declarations

Intent: To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products from manufacturers who have verified improved environmental life-cycle impacts.

Option 1. Environmental Product Declaration (EPD) (1-Point)

Recommended Language:

EchoPanel Acoustical Panels have a third-party verified, Product-specific Type III Environmental Product Declaration (EPD), including external verification and external critical review, with a cradle-to-gate scope. EchoPanel Acoustical Panels are valued as 1.5 products for purposes of credit achievement calculation.

Material and Resources (MR)

Credit: Sourcing of Raw Materials (1-2 Points)

Intent: To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner.

Recommended Language:

Recycled Content: EchoPanel Acoustical Panels are composed of 60% Post-Consumer Recycled PET fibers, and can contribute to the required 15% by cost of the value of permanently installed building products required for this credit.

Material and Resources (MR)

Credit: Material Ingredients

Intent: To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved life-cycle impacts.

Option 1. Material Ingredient Reporting (1 Point)

Recommended Language:

EchoPanel has a published Declare Label and a published and complete Health Product Declaration (HPD), with full disclosure of known hazards of all substances present at or above 0.01% (100 ppm). EchoPanel Acoustical Panels can contribute one whole product to the 20 different permanently installed products required for this credit.

Indoor Environmental Quality (EQ)

Credit: Low-Emitting Materials (Up to 3 Points)

Intent: To reduce concentrations of chemical contaminants that can damage air quality and the environment, and to protect the health, productivity, and comfort of installers and building occupants.

Recommended Language:

EchoPanel has been tested according to CDPH Standard Method v1.2, and is compliant for Individual VOCs of Concern and Formaldehyde for both Classroom and Office Scenarios, with TVOC ≤ 0.5 mg/m³.

Indirect Credit Contributions:

Material and Resources (MR)

Credit: Building Life-Cycle Impact Reduction

Option 2. Whole Building Life-Cycle Assessment (1-4 Points)

Intent: To encourage the adaptive reuse and optimize the environmental performance of products and materials.

Recommended Language:

EchoPanel has a third-party verified Type III Environmental Product Declaration (EPD), and can provide Life Cycle Inventory (LCI) data to assist with completion of a whole building Life Cycle Assessment (LCA).

Material and Resources (MR)

Credit: Construction and Demolition Waste Management (Possible 2 Points)

Intent: To reduce construction and demolition waste disposed of in landfills and incineration facilities through waste prevention and by reusing, recovering, and recycling materials, and conserving resources for future generations. To delay the need for new landfill facilities that are often located in frontline communities and create green jobs and materials markets for building construction services.

Recommended Language:

EchoPanel Acoustical Panels are designed specifically for each project space, virtually eliminating any excess materials at the job site. Furthermore, packaging is minimal and is 100% recyclable, and can help achieve established goals for waste diversion, including Option 1 of this credit.

Indoor Environmental Quality (EQ)

Credit: Acoustic Performance (1 Point)

Intent: To provide workspaces and classrooms that promote occupants' well-being, productivity, and communications through effective acoustic design.

Recommended Language:

EchoPanel Acoustical Panels have a sound absorption coefficient up to 1.0, and may help reduce the reverberation time of various room types.

Section 2: WELL v2 Strategy Applicability and Language

Direct Credit Contributions:

CONCEPT: SOUND

Feature S05: Sound Reducing Surfaces

Feature Intent: Design spaces with sound reducing surfaces to minimize the buildup of speech or other unwanted sound.

Part 1: Implement Sound Reducing Surfaces (Max 2 Points)

Requirements: For projects in which open workspaces, areas for conferencing and learning, and dining areas cumulatively make up at least 10% of the occupiable project area, acoustical furnishings must meet the NRC requirements listed.

Recommended Language:

EchoPanel has a Noise Reduction Coefficient (NRC) of 0.45-1.0 for 12 mm panels, and 0.65-1.05 for 24 mm panels (determined by installation).

CONCEPT: MATERIALS

Feature X05: Enhanced Material Restrictions

Part 2: Select Compliant Architectural and Interior Products (1 Point)

Feature Intent: Minimize the exposure to certain chemicals by limiting their presence in products.

Requirements: At least 50% by cost, or at least 10 distinct newly installed products for all spaces must meet the following requirements, unless higher amounts mandated by local code:

- c) Ceiling and wall panels contain 100 ppm (0.01%) by weight or less of the following:
 - 1. Halogenated flame retardants (HFR).
 - 2. Orthophthalates.

Recommended Language:

EchoPanel Acoustical Panels do not contain halogenated flame retardants (HFR) or Orthophthalates.

CONCEPT: MATERIALS

Feature X06: VOC Restrictions

Part 2: Restrict VOC Emissions from Furniture, Architectural, Interior Products (Max 2 Points)

Feature Intent: Minimize the impact of volatile organic compounds (VOCs) emitted by products on indoor air quality.

Requirements: At least 75% by cost or surface area of insulation, ceiling and wall panels in all spaces must meet one of the compliance requirements listed.

Recommended Language:

EchoPanel has been tested according to CDPH Standard Method v1.2, and is compliant for Individual VOCs of Concern and Formaldehyde for both Classroom and Office Scenarios, with TVOC ≤ 0.5 mg/m³.

CONCEPT: MATERIALS

Feature X07: Materials Transparency

Feature Intent: Promote material transparency across building material and product supply chain.

Part 1: Select Products with Disclosed Ingredients (1 Point)

Requirements: At least 50% by cost or 25 distinct, permanently installed products and furniture for all spaces must have ingredient disclosures by the manufacturer, a disclosure organization or a third party through one of the options listed.

Part 2: Select Products with Enhanced Ingredient Disclosure (1 Point)

Requirements: At least 15 distinct, permanently installed products and furniture for all spaces must have ingredients disclosed to 100 ppm, be publicly disclosed by the manufacturer, a disclosure organization or a third party through one of the options listed.

Recommended Language:

EchoPanel has been inventoried to 100 ppm via a published Declare Label, a complete and published Health Product Declaration (HPD), and a certified Global GreenTag Product Health Declaration (PHD) with a GreenTag HealthRATE™ mark at PlatinumHEALTH level.

CONCEPT: MATERIALS

Feature X08: Materials Optimization

Feature Intent: Promote the selection of products that have been audited to minimize impacts on human and environmental health.

Part 1: Select Materials with Enhanced Chemical Restrictions (1 Point)

Requirements: At least 25 distinct, permanently installed products and furniture for all spaces must have ingredients inventoried to 100 ppm and meet one of several options listed.

Recommended Language:

EchoPanel has been inventoried to 100 ppm via a published Declare Label, a complete and published Health Product Declaration (HPD), and a certified Global GreenTag Product Health Declaration (PHD) with a GreenTag HealthRATE™ mark at PlatinumHEALTH level.

Part 2: Select Optimized Products (1 Point)

Requirements: At least 15 distinct, permanently installed products and furniture for all spaces must be certified under one of the several programs listed.

Recommended Language:

EchoPanel has a certified Global GreenTag Product Health Declaration (PHD) with a GreenTag HealthRATE™ mark at PlatinumHEALTH level.

Indirect Credit Contribution:

CONCEPT: SOUND

Feature S04: Reverberation Time

Feature Intent: Design spaces in accordance with comfortable reverberation times that support speech intelligibility, vocal effort, and are conducive to concentration.

Part 1: Achieve Reverberation Time Thresholds (2 Points)

Recommended Language:

EchoPanel Acoustical Panels have a sound absorption coefficient up to 1.0, and may help reduce the reverberation time of various space types.