

Important updates to LEED® EPD provisions and relevance to tile

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In February 2019, the U.S. Green Building Council (USGBC) released the newest edition of Leadership in Energy and Environmental Design (LEED), Version 4.1. From review of the updated criteria, a prioritized focus on reduced carbon pollution can quickly be observed. This has resulted in objectives which are more achievable than before, which emanate from expanded product life cycle considerations and which are generally favorable for tile.

Updates to the Credit, Building Disclosure and Optimization – Environmental Product Declarations (EPDs), are substantive. Similar to v4.0, the use of products with EPDs can earn up to two points on a LEED v4.1 project. One point can be earned if enough products transparently report life cycle environmental impacts. A second point can be attained if enough products are selected on the basis of optimized life cycle environmental impact reduction. Where v4.1 differs is in its expanded recognition of industry-average environmental impact reporting and its focus on carbon footprint comparison.

Benefits for tile in v4.1

For tile, the LEED v4.1 EPD updates mean the following: any tile, mortar or grout represented by one of the several tile industry-wide EPDs can contribute one full product toward a 20-product threshold required to obtain a point on a LEED v4.1 project. That's compared to the former 0.5 product contribution in LEED v4. This means that specifying a single tile system—tile, mortar, and grout—which is represented by an industry-wide EPD, could satisfy three of the 20 products required for an entire building.

Furthermore, opportunities to obtain a second EPD point through the use of tile on a LEED v4.1 project are more attainable than they were with v4. Previously for v4 under the “optimization” option of the EPD credit, 50% by cost of all products used on a project had to have an environmental footprint lower than the industry average across three different environmental impact categories. With v4.1, only a minimum of 10 optimized products are required. What's more is that a building material counts as 0.5 product if the manufacturer simply has a life cycle impact reduction plan for that product, regardless of whether it's better or worse than industry average. Additionally, a building material can contribute one full product if its carbon footprint is lower than comparable building material(s) considered for the same function, 1.5 products if it has a 10% lower carbon footprint, and two products if it has a 20% lower carbon footprint.

Industry-wide EPDs facilitate optimization strategies

For tile and EPDs, the big picture LEED v4.1 takeaway is simple. Industry-wide EPDs are helpful now, more so than ever before. USGBC has clearly emphasized the importance of industry-averaged life cycle data, which is inherent to EPDs, as such data is critical toward optimized environmental life cycle performance. Not only do products included in industry averages now contribute a full product toward the environmental life cycle transparency threshold, such data can be used as an important reference point for a manufacturer to strive for optimization through continuous improvement. Averaged data can also be used to compare carbon footprints of two separate types of products within the same product category for optimized specification. Industry-wide EPDs facilitate both optimization strategies toward the additional LEED point.

With industry-wide EPDs and the direction in which USGBC continues to evolve with LEED, the tile industry remains poised for sustained contribution to LEED building projects for years to come.