



LEED Certification

CONTRIBUTION OF CERAMIC GLAZED BRICK & STRUCTURAL GLAZED TILE

Elgin Butler Company certifies the use of its Ceramic Glazed Brick and/or Structural Glazed Tile Products to help achieve Leadership in Energy & Environmental Design (LEED) certification.

Referencing the LEED Green Building Rating System for New Construction & Major Renovations (LEED-NC) as published by the United States Green Building Council (USGBC).

Specific credits that may apply to our products are as follows:

LEED CATEGORY: ENERGY AND ATMOSPHERE (EA)

EA Credit 1 Optimize Energy Performance

Ceramic Glazed Brick used in passive solar designs to take advantage of their thermal mass can reduce temperature swings, store heating/cooling for release at later times and reduce peak energy loads. **Buildings which reduce design energy cost by 15% to 60% when compared to the energy cost budget for energy systems regulated by ASHRAE/IESNA Standard 90.1-1999 (without amendments) can qualify for this credit.

LEED CATEGORY: MATERIALS AND RESOURCES (MR)

MR Credit(s) 4: Recycled Content

Recycled Content: Postconsumer 0

Recycled Content: Preconsumer 1

- 11.1% by weight preconsumer recycled content

MR Credit(s) 5: Regional Materials (Points to be determined by location)

Extracted, harvested or recovered, as well as manufactured within 500 miles of the project site.

** Reference document from the Brick Industry Association

LEED CATEGORY: INNOVATION AND DESIGN PROCESS (ID)

While not qualifying for a designated LEED credit, the following are possible areas where Ceramic Glazed Brick and/or Structural Tile masonry may contribute to an Innovation in Design (ID) Credit:



The following are possible areas where this structural glazed tile may contribute points as an **Innovation in Design (ID) Credits 1:**

- 95% of the raw material used in manufacturing the brick is on-site. No input shipping distance offsets most output shipping distances.
- Rail shipping: 1/3 of the fuel usage compared to overland trucking; therefore, 1,500 miles is equivalent.
- Clay is considered an "unlimited resource" material and primary manufacturing ingredient.
- No Volatile Organic Compounds (VOC's) or off-gassing from finished product as it has been fired to over 2000°F
- Improved air quality by eliminating the need for paint or interior coatings (thereby eliminating VOC's) or the need for harsh chemical cleaning agents.
- Acoustics
- Thermal mass
- Eliminating the possibility of mold growth as there are no organic materials that can contribute to mold or bacteria growth or sustain insects
- Building life-cycle is 100+ years and the material durability, when and if ever torn down, may be 100% recycled.

In addition, although not specifically designated for LEED credit, our manufacturing facility referenced above incorporates the following energy and waste reduction procedures to produce brick and tile:

- Reuse of gray water for brick production
- Radiant kiln heat is recycled to pre-kiln storage and warm-up
- Ceramic Glaze is recycled with less than 2% waste
- Approximately 30% of the body formula is batched from recycled or reworked materials. 18.7%, by weight, is dried greenware rework and approximately 11.2%, by weight, is ground grog, or recycled fired waste materials.
- Dust reclamation system
- 20% of the electrical energy used throughout our company including manufacturing comes from a renewable source (certificate on file)
- We are currently working toward certification as an Environmentally Preferred Product by a third party source.

Elgin Butler Company is proud to support the U.S. Green Building Council LEED certification rating system. Through research and innovation, Elgin Butler will continue the journey to improve its contributions for GREEN design.

Build it once to last a lifetime.