

Based on review of LEED-NC Version 2009, we suggest that a LEED AP consider the following areas where Trikeenan's Boneyard Brick, Reclamation, Modulus, Basics, Elementals and Glass collections may contribute to gaining LEED points or contribute toward the creation of environmentally-friendly projects.

### 1) MR Credit 4: Recycled Content: 1-2 points

Trikeenan buys its brick from Metropolitan Ceramics boneyard, waste brick not able to be used for their customers due to rejects on specification requirements. This in turn is considered to be post-industrial waste for Trikeenan's Boneyard Brick.

Trikeenan buys its glass for the Arctic Glass and Glass Windows series from Oceanside Glasstile in Carlsbad, CA. 80-90% of the glass is post-consumer recycled content. Whenever possible we buy their scrap, making it post-industrial waste also.

Aside from actual post-consumer or post-industrial recycled content, Trikeenan also follows good green business practice on a pre-consumer basis:

- Trikeenan operates a closed loop system, with clean water in, clean water out.
- All scrapped clay is re-used in the manufacturing loop as is clean-up water and glaze waste wherever possible.
- Clay is considered to be "an unlimited resource" providing us with a raw material that is not synthetic or manufactured by man.
- Packaging material received from incoming materials and internal paper waste is shredded and re-used for packing materials going out.
- Trikeenan ships on wooden pallets and uses only biodegradable packaging materials.
- Trikeenan donates imperfect and seconds to non-profit organizations like Tile Partners for Humanity, Partners in Health or Juvenile Correction Centers for skill building and the making of community murals.
- All fired but unusable scrap tile material is donated and re-used by our communities for mosaic and educational purposes or in the making of roadbeds.
- Ceramic brick and tile is one of the longest lasting surfaces, therefore having a very low carbon footprint overall.

## 2) MR Credit 5: Regional Materials: 1-2 points

Trikeenan buys its brick from Metropolitan Ceramics where their raw materials are extracted from quarries that are located within 50 miles of their Canton, OH plant. Trikeenan glazes all brick in our Hornell, NY facility.

Canton, OH and Hornell, NY are located within 500 miles of all job sites in a circle encompassing (starting North and working clockwise) All of Michigan; all of NY, VT, NH, MA, RI, CT, NJ, PA, MD, DC, VA, WV, OH states, Portland, ME; Raleigh, NC; Nashville, TN; Indianapolis, IN; and the outskirts of Chicago, IL.

If a minimum of 20% of the product cost is derived from materials manufactured within 500 miles, then 1 LEED Point will be awarded.

If additionally a minimum of 10% of the product cost is derived from materials extracted, harvested or recovered within 500 miles, then 2 LEED Points will be awarded.

Given the job site is within 500 miles of Hornell, NY; the glazed brick material can be considered as a regional material. Given the jobsite is within 500 miles of Canton, OH the raw brick material can be considered as a regional material.

## 3) IEQ Credit 4.3: Low-Emitting Materials - Flooring Systems: 1 point

Trikeenan's products emit no VOC's, making Trikeenan tile 100% VOC free. This improves IAQ (Indoor Air Quality) with no off gases, no hazardous chemicals, volatile organic compounds or asbestos.

Even if heated to over 2,200 degrees F, no toxic fumes or ozone depleting substances or smoke will be emitted.

## 4) ID Credit 1: Innovation in Design 1 - 5 Points.

The basis for quantifying the point(s) for Trikeenan's Boneyard Brick and Reclamation Tile Collections is the glaze is made up of captured and reclaimed waste glaze on a pre-consumer level. Using a closed loop system Trikeenan traps all glaze sludge left over from glazing other ceramic tile collections. Clean water in, clean water out.

The basis for quantifying the point(s) for Metropolitan's thin brick is thin brick is 80% less material than full unit masonry (3 5/8" thick material compared to 5/8" material). The 80% environmental savings applies to the quantities of earth, water, natural gas and diesel fuel to extract, transport, process, manufacture, store, and deliver the finished product.

Metropolitan's thin brick is manufactured by the split tile method as compared to extruding and baking a full brick and cutting off the face.

Trikeenan recommends that the LEED AP submit the Boneyard Brick and Reclamation Collections as an innovative material and ask to be awarded 1 to 5 points based on the amount of thin brick or reclamation tile used on the project:

- If the entire exterior skin is Boneyard Brick the LEED AP should ask for 5 points. The basis for being awarded 5 points is because thin brick affects 5 environmental categories to obtain the identical finished appearance as traditional masonry construction.
- If entire walls on the interior of the project are tiled with Boneyard Brick or Reclamation Tile, then the LEED AP should ask for between 2-3 points depending on the percentage of walls tiled.
- If the Boneyard Brick or Reclamation Tile is used as an accent, then the LEED AP should ask for 1 point. Asking for one point as compared to 5 points (per above) is based on the % of the overall project affected by the thin brick.