

General Shale Brick is pleased for the opportunity to describe our commitment to sustainable building design and our support of the Leadership in Energy & Environmental Design (LEED) Certification Program.

General Shale brick is a wise choice for a building wall material. It is maintenance free, it has an expected life of 100 years or more, and it is recyclable. General Shale brick contains no volatile organic compounds (VOC's) or asbestos and emits no toxic fumes or ozone depleting substances. General Shale brick is fire resistant and contains no organic materials that can contribute to mold or bacteria growth or sustain insects. A recent study prepared at the National Brick Research Center at Clemson University ranks brick ahead of concrete block, vinyl siding, fiber cement board, and EIFS when analyzing energy consumption, pollution, and life expectancy. In short, General Shale brick is an excellent “green” building material.

General Shale Brick's regional marketing strategy means we have facilities located close to most metropolitan markets. Well over 95% of our raw materials are mined within 25 miles of our manufacturing facilities.

We have taken steps at all of our plant locations to insure we give architects and designers a product that they will use in their project that exceeds their expectations and insure their project has a long sustainable life expectancy. All of our products are manufactured to exceed the requirements of the ASTM Standard Specifications (ASTM C216 or ASTM C652 as specified by the project architect) for Masonry Units made from Clay or Shale.

The following information has been provided to help architects and designers evaluate General Shale brick as a green building material. As recommended by the American Society for Testing and Materials (ASTM) Standard Practice E2129 *Standard Practice for Data Collection for Sustainability Assessment of Building Products* we have also attached General Shale's Corporate Environmental Policy. Should you require more information regarding the LEED Certification application for your specific project; our local sales representatives will be more than happy to assist you.

Awards & Recognitions:

1. Two time winner of *Industrial Pollution Prevention Award* from the Tennessee Department of Environmental and Conservation (TDEC) for use of industrial waste from outside sources, such as bottom ash, in the making of brick and block.
2. *Industrial Conservationist of the Year Award* from the National Wildlife Federation and Tennessee Conservation League for donation of property and work in creating a wildlife preserve.
3. *Industrial Air Pollution Control Achievement Award* from the City of Huntsville, Alabama for voluntary actions taken to reduce air pollution.
4. *State Mineral Mining Reclamation Award* from the Commonwealth of Virginia for mine reclamation efforts taken above and beyond regulatory requirements.
5. *President's Award* from the Georgia Mining Association for maintaining and creating natural habitat in Atlanta.

6. Two time winner of *Outstanding Achievement in Solid Waste Management Award* from the Tennessee Association of Business for unique approaches in waste reduction including reduction of power and fuel usage.
7. *Certificate for Air Quality Improvements* for voluntary reduction of sulfur dioxide and particulate emissions.
8. *U.S. EPA Wastewise Award Nomination* for General Shale's continuing unique efforts and successes in reducing solid waste from the corporate office to every plant.
9. *Tennessee Department of Environment and Conservation Pollution Prevention Partnership Pledge Award* for actively participating in state's voluntary program to further reduce waste.
10. Nomination for Indiana Governor's Award for Environmental Excellence for use of recycled products and unique recycling efforts.

Recycling:

1. Packaging materials are all made of recyclable products and/or have been previously recycled from materials such as plastic bottles, furniture, paper products, and so on.
2. Damaged or low quality brick are made into brick chips for landscaping purposes or ground again to be made back into brick. Brick is 100% recyclable.
3. Damaged and worn machinery are many times returned to the manufacturer to be reworked or 100% recycled.
4. Worn materials are reused in unique ways, such as using old conveyor belts as mats in trucks or padding for machinery.
5. 100% of waste water is recycled and reused in the brick manufacturing process.
6. Paper, aluminum, and cardboard are recycled as at any industrial facility.
7. Waste material from other industries is used in manufacturing of brick and block.
8. Voluntary programs in five states and through the U.S. EPA Wastewise program assist to reduce waste and aide other industries in reducing wastes
9. At several of our plant locations the brick kilns are fired with 100% recycled fuel, a waste stream by-product, sawdust.

Reclamation of Property:

1. Over 300-acres of previously farmed land has been bought by General Shale and returned to its natural state as a wetland.
2. Wildlife has been restored in wetlands.
3. A brick residential community has been constructed where material mined from the site was used in brick manufactured for the development.

4. Property has been restored to its previous use as farmland in growing crops from corn to soybeans.
5. Property has been returned to its natural state as a grassland or timbered land.
6. Property has been donated to organizations, such as churches, for various uses.
7. Old mining property has been developed as a landfill where wells are already creating methane gas that may one day be used at the brick plant to help fuel kilns.

Other Voluntary Activities:

1. Bag houses are installed at most grinding rooms and mill rooms throughout the company. None of these control devices are required under state or federal regulations and are only meant to minimize our particulate emissions from both an employee health and safety standpoint and environmental standpoint.
2. Water trucks and dust suppressant products are used on roads to minimize fugitive dust emissions.
3. Several plants have begun using non-VOC containing cleaners and other products, especially at plants located in ozone nonattainment areas.
4. Skylights and motion switches have been installed at plants to reduce electrical use for lighting.
5. Older equipment has been replaced with more efficient equipment thus saving on power and fuel.
6. Innovative and experimental kiln firing and heated air recycling techniques are being employed to further reduce fuel usage.
7. Experimentation with waste products from other industries for use in our manufacturing process is continuing.



General Shale

Building The American Dream®

Environmental Policy

General Shale is committed to excellence in our people, products, and customer relations. Environmental protection, to include the creation of safe and healthy labor conditions and the continuous improvement and prevention of pollution, is one of our highest priorities. It is our policy:

Conformance with Environmental Regulations

- I. To maintain an active, self-monitoring program to ensure full compliance with both company standards and regulatory requirements.

Minimization of the Impacts on the Environment

- II. To minimize emissions into the atmosphere from our facilities.
- III. To ensure the discharge of acceptable storm water from our operations.
- IV. To minimize or eliminate waste from our manufacturing processes.

Energy and Raw Materials

- V. To decrease our consumption of energy, raw materials, and other resources, including by the reuse or recycling of materials.

Mining Operations

- VI. To be good stewards of our land by conducting efficient mining operations and fully reclaiming for the highest and best future use.

Incident Preparedness

- VII. To maintain plans for prevention of environmental incidents, such as spill prevention, that minimizes any potential impact on the environment.

Preliminary Environmental Assessment

- VIII. To evaluate the impact of planned projects and modifications on the environment.

Training of Employees

- IX. To provide timely and appropriate environmental training to employees.

Public Relations

- X. To maintain a dialogue with the public and interested parties regarding the impact of the company's actions on the environment.

By nurturing environmental awareness of our activities and continually improving our processes and products, we commit ourselves to responsible protection of our environment.