



**Brick Is
A Natural**



Brick Is Green

The definition of “green” is continuing to evolve and now includes sustainability, energy efficiency, conservation and the long-term impact on our environment. General Shale is America’s largest brick manufacturer, a major concrete block manufacturer and supplies a wide variety of masonry materials for the construction industry. Our company has a long history of responsible stewardship of the environment and has received numerous awards for our conservationist accomplishments. We are proud of leading our industry with innovative processes while providing the world’s best building materials for customers across the country.

Monticello, built in 1769 was the home of President Thomas Jefferson.



Sustainability

To be truly sustainable, a building material must stand the test of time. Brick is one material that a homeowner will never have to replace and requires virtually no maintenance. With its long life cycle of over 100 years, the sustainability of brick is without equal. Brick provides a safe, sustainable environment for your dream home. Brick is fire resistant, impact resistant from wind borne debris or projectiles, and provides excellent resistance to sound transmission.



Energy Efficiency

Brick homes are more energy efficient than many people realize. Due to its high thermal mass, brick responds slower than other exterior cladding materials to changes in temperature; this phenomenon is called “thermal lag”. Thermal lag keeps the inside temperature of a home at a more moderate temperature level when outside temperatures change and thus reduce peak heating and cooling loads on a home’s HVAC system.



Manufacturing

Our manufacturing processes have continuously improved to reduce energy consumption. Raw material is located close to the production facility to reduce transportation costs, use of automation to reduce energy is a cornerstone of our manufacturing philosophy, and recycling brick that does not meet quality standards is fully integrated into our process. Our residential brick are made to meet ASTM C652 which uses less material and thus lowers energy cost throughout the manufacturing process and finished product delivery.



The Environment

Protecting the environment is at the core of the General Shale culture. Brick is made from one of the earth's most abundant materials and choosing brick for your home provides far reaching environmental, social and economic benefits. General Shale has won numerous conservationist awards for its efforts in responsible raw material harvesting, manufacturing practices and reclamation efforts. Waste is kept at an absolute minimum from production practices to job site construction.

	Brick Masonry	Block Masonry	Fiber Cement Board	Vinyl Siding	EIFS
Basic Data Warranty Weight/ft ²	100 years 35.5 lb.	50 years 42.8 lb.	50 years 2.3 lb.	50 years 0.5 lb.	5 years 1.24 lb.
Energy, Mining and Manufacturing Recycling and Energy, kWh/ft ² /yr	Recycling: Brick 100% and mortar 40% Energy: 0.252	Recycling: 80% Energy: 0.228	Recycling: 0% ¹ Energy: 0.328	Recycling: 80% ² Energy: 0.210	Recycling: 0% ¹ Energy: 5.48
Pollution Water and air emissions, lb/ft ² /yr	0.011	0.005	0.026	0.001	0.023
Distribution Energy Average Distance, mi. and Net Energy, kWh/ft ² /yr	175 miles 0.004	100 miles 0.004	365 miles 0.146	310 miles 0.001	300 miles 0.189 ³
Waste and Depletion lb/ft ² /yr	0.108	0.203	0.048	0.460 ⁴	0.828
TOTALS					
Energy	0.256	0.232	0.474	0.211	5.669
Pollution	0.011	0.005	0.026	0.001	0.023
Waste and Depletion	0.108	0.203	0.048	0.460	0.828

¹ No proven method available.

² Used the maximum allowed in this analysis (80%). According to the Vinyl Siding Institute, 100% of vinyl siding is recyclable. Some environmental groups claim recycling of vinyl siding results in dioxin emissions.

³ Low weight per truckload influenced results.

⁴ Depletion of salt in producing PVC influenced results.

Cladding Building Materials Life Cycle Analysis



General Shale
Building The American Dream®

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