

THE SUSTAINABLE ATTRIBUTES OF EXTERIOR CLADDING MATERIALS

A True Look at “Green” Claims

Prior to making decisions on cladding materials and their impact on the environment, it's important for builders to consider the true facts regarding siding products' green positions. Many materials claim green or sustainable attributes, but a comparison between manufactured stone and brick shows the true story. A quick review of the facts will show that precast concrete is not as green as you think.



IN THE MANUFACTURING PROCESS

RECYCLED CONTENT

PRECAST CONCRETE

- Can contain both pre- and post-consumer recycled content, depending on the manufacturer.

BRICK

- Contains both pre- and post-consumer recycled content, depending on the manufacturer.

MANUFACTURING AND DISTRIBUTION

PRECAST CONCRETE

- Manufacturing process places burdens on fossil fuels, natural raw materials, land, energy, and process emissions.

BRICK

- Waste products such as methane gas from landfills and sawdust used in production, depending on the manufacturer.
- At least two plants located within 500 miles of all but one of 50 largest MSAs.

THIRD PARTY CERTIFICATION

PRECAST CONCRETE

- Industry makes no claims about certification.

BRICK

- Manufacturers can achieve third-party certification for extent of recycled content, use of alternative energy, and amount of resources reduced.



ON THE JOB SITE

WASTE MANAGEMENT

PRECAST CONCRETE

- Emissions from concrete industry amount to 5% of all CO2 emissions.

BRICK

- Reusable scrap materials, minimal packaging.
- Very little on-site waste produced due to modular units.

ENERGY EFFICIENCY

PRECAST CONCRETE

- High thermal mass properties allows heat to be stored and released later.

BRICK

- More thermal mass since typical brick veneer thickness is 3 to 3-5/8 inches.

LIFE CYCLE & DURABILITY

PRECAST CONCRETE

- 100 year life span.

BRICK

- 100 year life span.
- Low maintenance requirements.

SAFETY & SECURITY

PRECAST CONCRETE

- Material can pose serious safety hazard when a fire damages panel connections and causes panels to fail.

BRICK

- Provides 1-hour fire resistance rating.
- Offers superior resistance to wind-blown debris.

According to experts and certification groups, the future of green home building and sustainable design resides in the life expectancy and life cycle of the building, energy efficiency, and the impact building materials have at the end of their useful life. The Brick Industry offers building professionals a product that assists in all three areas.



BRICK IS A NATURALLY SUSTAINABLE MATERIAL

- Use of abundant natural resources, clay and shale.
- Improved manufacturing processes use less energy and reduce emissions.
- Use of alternative fuel resources such as landfill gas and wood waste materials.
- Strategically located plants to help reduce transport emissions.
- Contributes to energy efficient homes with high thermal mass.
- Long life cycle, durable, low maintenance, no painting required.
- Recyclable and biodegradable thereby reducing its embodied energy.
- A built-in and in-demand market for recycled re-use of old brick.



BRICK IS AN INVESTMENT IN BEAUTY & VALUE

- Consumers prefer brick over other cladding/siding materials.
- Brick's natural beauty is timeless and design possibilities are endless.
- Brick's longevity and local availability make it one of the greenest building products made today.
- Brick conveys a message of quality, image, and prestige about the home builder and community.
- Brick has the longest history of product performance and durability.
- Brick is virtually maintenance-free.
- Brick is a perfect fit within any architectural style.

* Source: Ducker Worldwide 2008 homebuyer research study



BRICK: THE GREEN POINTS ADD UP

National Green Building Standard™

Brick can assist in contributing up to **175½ points** out of approximately 2,000 possible points

LEED for Homes™ (USGBC)

Brick can assist in contributing up to **19½ points** out of a possible 136 points