ENVIRONMENTAL IMPACT & STEWARDSHIP

METROBRICK® manufactures TBX Grade Architectural Thin Brick to be used with the following systems: Precast Concrete Panels, Tilt-up Concrete Panels, Prefabricated Metal Panels, Field Applied Systems/Applications and Cast in Place Concrete Elements.

**THIN BRICK USES 80% LESS**
80% of full brick is never seen. Thin brick allows for more building options like added insulation and more interior space.

**BETTER PERFORMANCE**
METROBRICK® walls allow for continuous insulation and create lower utility bills.

Images provided by: Thermomass Insulation Systems.

**LESS RAW MATERIALS**
METROBRICK® uses 1/5 the amount of raw material (clay and shale) needed to manufacture the same surface coverage as full brick.

**LESS NATURAL GAS**
To fire 700,000 pieces, METROBRICK® uses nearly 1/5 the amount of natural gas than the same surface coverage of full brick.

**FEWER TRUCKS**
METROBRICK® requires 8 fewer semi trucks to deliver the same amount of modular surface coverage as compared to full brick.

**RECYCLED CONTENT**
The following chart contains percentages of pre-consumer recycled material defined as follows: Pre-consumer recycled material is a waste product of a manufacturing process, diverted from the waste stream and not normally used by industry during the original manufacturing process.

**SINGLE TONE COLORS**
- 101 Commons 4%
- 105 Fieldstone 4%
- 107 Parkway 4%
- 205 Marketplace 6.3%
- 220 Courtyard 12.2%
- 310 Main Street 9.6%
- 320 Schoolhouse Red 44.8%
- 505 Monument 4%
- 507 Empire 4%
- 108 Brownstone 6.0%

**RANGE COLORS**
- 151 Commons Flashed 4%
- 155 Fieldstone Flashed 4%
- 458 Brownstone Flashed 6%
- 255 Marketplace Flashed 6.3%
- 250 Courtyard Flashed 12.2%
- 350 Main Street Flashed 9.6%
- 365 Schoolhouse Red Flashed 44.8%
- 505 Monument 4%
- 507 Empire 4%
- 108 Brownstone 6.0%

Note: Percentages based on five year average. (2011-2015)
MATERIALS AND RESOURCES

Building Life Cycle Impact Reduction | METROBRICK products have a 60+ year lifespan and can last the life of the building.

Product Disclosure {Source of Raw Material} | METROBRICK products contain pre-consumer recycled waste material. METROBRICK products can be reused or salvaged. Nearly all raw materials are extracted within a 50 mile radius of the manufacturing facility.

Product Disclosure {Material Ingredients} | METROBRICK products are fired in kilns at temperatures above 2,000 degrees Fahrenheit and are made of inert ceramic material.

Construction and Demolition Waste Management | METROBRICK products are inert material after firing and can be reused or reclaimed as fill or road bed material. Sizing of the product is such that there is little job site waste of material. Packaging material is recyclable.

INDOOR ENVIRONMENTAL QUALITY

Low Emitting Materials | Ceramic products are cited as an “inherent non emitting source” for this credit. METROBRICK may be used for this credit without testing.

Construction Indoor Air Quality | METROBRICK products are VOC- free and are resistant to mold and mildew.

Indoor Air Quality Assessment | METROBRICK products are inert. They are VOC- free and are formaldehyde free.

Thermal Comfort | The thermal mass of METROBRICK products allows them to aid in creating a more consistent indoor environment.

Interior Lighting | METROBRICK manufactures light color thin brick.

INTEGRATIVE PROCESS

Integrative Process | METROBRICK thin brick used as part of an installation wall system can have a positive impact on other building systems. The wall system that includes METROBRICK should be evaluated as part of a project’s integrative analysis.

ENERGY AND ATMOSPHERE

Optimize Energy Performance | The thermal mass of METROBRICK products may help in the moderation of indoor temperature swings.
SUSTAINABILITY
Because METROBRICK® absorptions are much less than full bed brick, spalling and efflorescence are reduced or eliminated. The building facade can basically last forever. With the thin brick attached to the wall system, minor repairs require only the removal of the affected bricks. Full bed brick building repairs are much more costly and difficult. Since thin brick is not a structural element and each brick is independently adhered to the wall, cracks don’t form between bricks like in full bed brick.

SITE DISTURBANCE
• No special or additional foundation is required for the structural support of METROBRICK®.
• The weight of METROBRICK® is engineered in the wall system. Full bed brick requires additional foundation for its support, requiring additional steel and concrete.
• Post installation clean-up for thin brick is significantly less than full bed brick. Little or no cleaning agents are required at the job site when using thin brick.
• If thin brick is used in precast concrete or tilt-up construction, scaffolding is not needed for brick work. Panels can be erected from either outside or within the perimeter of the structure, thus allowing more existing trees to remain.

MANUFACTURING PROCESS
Ironrock, through its METROBRICK® brand, is proud to say we are doing our part to be good stewards of our environment in the following ways:
• All unfired clay is reground into our finished products.
• The heat from our kilns is also a heat source for our dryers.
• Our fired scrap is made available for use in making roadbeds as well as being reground and reused in our finished products.
• All METROBRICK® colors contain a minimum of 4% pre-consumer recycled content.

ENVIRONMENTAL ADVANTAGES