## Benefits of Green Building and LEED Construction by the use of



## **Environmental Benefits:**

Piazza Cast Mix is a combination of natural stone materials, principally marble, recovered from debris fields in quarries and residue from fabrication. No new material is mined. Production therefore is only using material previously discarded.

Hydrocarbons used in the recovery are confined to fuel for loaders and not for the drills and cutting tools used to excavate the marble. A 50 pound bag of Piazza Cast Mix will contain approximately 50% of reclaimed materials.

No hydrocarbons are used in the blending process or the manufacturing process.

When the raw materials are blended with marble, air handlers are incorporated to prevent any dust being released into the atmosphere. Any residue is reintroduced into the Piazza Cast Mix during subsequent blending.

Piazza Cast Mix when manufactured into an Architectural Lightweight Masonry Unit, uses approximately 84% less water than used in the production of concrete.

The Architectural Lightweight Masonry Unit, while cast at a central location, weighs significantly less than an architectural piece of natural stone of cast concrete. Therefore, the transportation and handling of these cast pieces requires far less hydrocarbons to move the pieces to a job site.

EPS shapes used in manufacturing the casting inserts are made from expanded polystyrene.

All Architectural Lightweight Masonry Units are created to tight tolerances in sizes and shapes. This eliminates waste created by field fabrication and on-site casting.

## **Economic Benefits:**

The Architectural Lightweight Masonry Units are impervious to weather, wind, and sun due to the hardness attained at the end of curing. Thus the owner of the building will have significantly less concerns over deterioration during the life of the building.

Installation of Architectural Lightweight Masonry Units is drastically easier than the erection required with natural stone or concrete, requires minimal lifting capabilities and facilitates ease of use by the installing personnel. The Architectural Lightweight Masonry Units weigh significantly less than natural stone of cast stone allowing the engineer to reduce the load requirements for the total structure. This limits the amount of steel and concrete needed for the supporting structure.

The cost of maintaining the Architectural Lightweight Masonry Units during its life cycle will be significantly less than competing products due to the integral natural earth colored pigment used and the low water absorption (less than 3%) due to the 6,850 psi of the finished product.

Architectural Lightweight Masonry Units has been tested to ASTM C666 and has received certification that will endure a minimum of 100 years thereby giving building owner's confidence that no replacement will be required.

The utilization of Architectural Lightweight Masonry Units will permit the owner to achieve an esthetic of natural stone at significant savings. Indirect costs are also less for the owner due to the lower weight of the units in conjunction with the ease of installation with Piazza Track System.

## Health and Community Benefits:

During the installation, there are no volatile organic compounds released in any application attaching to any substrate.

Architectural Lightweight Masonry Units provide the architect the opportunity to restore older structures to recapture the original elegance of historic sites, thereby saving the consumption of new materials and demolition costs.

Architectural Lightweight Masonry Units are manufactured of materials that are non-combustible, thereby complies with NFPA 285. In a fire, there will be no creation of harmful chemicals released into the environment.