

Increased Use of Post Consumer Recycled Material in Concrete

As the economic stimulus packages begin to roll out, especially those related to infrastructure spending, many concrete product producers will begin looking for ways to tap into these projects and gain a substantial high-ground advantage in the procurement of these funds.

Two key trends are emerging that will separate the innovators from the followers and establish a new level of leadership within the industry: the green building products movement, and the use of recycled materials in the production of building materials.

The ever increasing adoption of LEED and other nationally recognized programs geared toward the use of innovative design and construction materials is gaining significant momentum within the A&E design community. Both public and private sector construction projects, and the design teams attached to them; are now seeking to take better care of our environment and limit the negative effects of future development.

For manufacturers of all kinds, this will provide an opportunity to find markets that were heretofore inaccessible or at the very least, difficult to penetrate. For producers of concrete products the opportunities are considerable given the current focus on the rebuilding of our roads and bridges, if they can properly position themselves.

Key product solutions like storm water management, control and limitation of solid surface pavement, and the incorporation of recycled materials in the manufacture of all concrete products have shown extensive traction and acceptance. The use of permeable paver systems with the ability to contain large volumes of storm water on-site and within the system are being researched and specified in an ever expanding array of project types.

In addition, some concrete product manufacturers are now replacing up to 20% of some natural aggregates with processed post consumer recycled materials. This trend will generate benefits on several levels from the extension of natural resources, a reduction in waste build-up, and the increased development of alternative products that can be incorporated into these applications.

A number of concrete producers are already incorporating crushed waste concrete and cement replacements like fly ash and slag cement into their mixes to differentiate themselves as providing a green product. While these actions are admirable and cost effective, the true potential will be realized with the incorporation of post consumer waste products and the continued development of new and innovative products.