

The Concrete Producer

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Sun Precast's Gary Fry helps the cast stone industry prosper in the 21st century.

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BY RICK YELTON

► By embarking on a certification program, members of the Cast Stone Institute have solidified their product's place in the market.

Pulling Forward

Messing with Mother Nature can be dangerous. That's probably the main reason why Gary Fry and his team of craftsmen at Sun Precast in Beaver Springs, Pa., take their jobs so seriously. For more than 30 years, Sun Precast has provided cast stone elements for many of the major masonry projects on the East Coast.

Through their work, they have transformed basic concrete into construction elements that exceed the performance requirements of many natural stones, without sacrificing beauty. Sun and the more than 40 cast stone producers across U.S. don't simulate stone—they make building elements.

For Fry, this distinction is important. He witnessed the use of his product on a long list of successful projects. "Every time I see a project, the role that cast stone has played in it evokes a sense of pride," says Fry. And from the contractor-turned-producer, that's high praise.

Looking forward to what he describes as his hope for an active retirement, Fry has great expectations that cast stone will continue to prosper and play a key part in the building market. And he has been a key person in an important effort that has transformed an 80-year-old trade association into a 21st century information provider.



Eric Randolph transports product from Sun Precast's finish building to the yard for staging and loading onto flat bed trailers for shipment.

PHOTOS: ALAN WYCHERK / GETTY IMAGES

When The Cast Stone Institute (CSI) was formed in 1927, its main mission was to promote using a new building material and help develop a standard. Now the group's mission is to provide expert counsel to the architectural and engineering communities on the proper uses of cast stone. Key to this task has been the refocus from product assurance to producer performance.

"We must commit to make the process fair, consistent, and clearly responsive to the needs of our customers," says Fry. "Certification is a mechanism to allow verification of compliance with performance criteria that addresses the needs and concerns of our customers, specifically builders and designers."

Thousands of elements

The move to producer certification is important for the cast stone industry. There are hundreds, perhaps thousands, of cast stone elements on the market today. As such, cast stone production is a labor-intensive activity. Producers employ form-makers, carpenters, and finishers who possess the skills of an artisan craftsman.

Meeting a growing demand for their product in the repair, renovation, and new construction markets, CSI members now ship their products far beyond normal geographic boundaries. It's not usual to ship hundreds of miles. "With a widespread customer base, it's important that specifiers be guaranteed a fair, consistent method to select their product," says Fry.

A new producer often thinks cast stone production is an easy task. Such start-ups often find initial success in offering one style of element for a local project. But when that same producer tries to expand, the real challenge begins.

"Creating a product that meets the ASTM specification, conforms

What is Cast Stone?

While cast stone has been a popular building material since the 1920s, it's hard to pin down an exact definition for this versatile product class. The American Concrete Institute defines cast stone as



Assorted coping, stair treads, and panels are staged at Sun Precast's yard.

"concrete or mortar cast into blocks or small special molds so as to resemble natural building stone."

In ASTM C 1364, the Standard Specification for Architectural Cast Stone, the committee defines cast stone as "an architectural precast building unit intended to simulate natural cut stone."

The Cast Stone Institute best defines its members' product as "a refined architectural concrete building unit manufactured to simulate natural cut stone used in unit masonry applications."

In practice, cast stone is a masonry product, used as an architectural feature, trim, ornament, or facing for buildings or other structures. As such, its placement is governed by masonry specifications, often within the jurisdiction of the Masonry Standards Joint Committee and other masonry associations.

Unlike veneer stone, cast stone conforming to the ASTM C 1364 standard requires substantially different physical requirements than cultured or simulated stone products. Since cast stone is often used as a structural member, it must have a minimum compressive strength of 6500 psi, a maximum absorption of 6%, and pass a rigorous freeze-thaw test.

In simplest terms, cast stone differs from architectural precast in two ways. First, the cast stone elements are normally smaller and designed to be included in a masonry assemblage. Second, a mason usually installs cast stone.



Cast stone simulates natural cut stone, as evidenced in this commemorative plaque.

to an architect's dimensional requirements, has consistent color and texture, and is priced within the owner's budget is more difficult than most new producers think," says Tom Lepisto of Hoyle Stone Products in Mitchellville, Md. In his more than 20 years in the business, Lepisto has witnessed the start-up and failure of

several producers. "The failure of a producer, whether a member of CSI or not, casts problems for all of us," he says.

Lepisto views the CSI certification requirement for membership not as a way to exclude producers, but as a way to mentor new companies and to share important innovations. He

is proud of how CSI members shared information about technology as they finalized the certification requirements. "Although we are all tough competitors, our willingness to pull quality forward is evident in our regards for each other," he says.

Fry believes CSI members' openness and consistency has been extended to the other members of the construction community through the certification effort. "We are using our program to reach out to several other trade organizations, forming alliances and relationships that provide added value to our membership and the industry," he says.

Certifying quality

The decision to embark on a certification program was cast almost two decades ago. Jim Edwards, CSI's president in 1998, had the foresight and, more importantly, the tenacity to start developing the certification process. CSI leaders then foresaw the importance of a formal code of ethics that now serves as the basis of the certification effort.

The code of ethics has created a common bond for industry improvement. Through supplementary programs that foster peer-to-peer interaction in education and training, members can share best practices and work together to promote the cast stone industry.

For Fry, the key to success has been developing a certification process that is managed by the numbers. "We



Plant manager Charles Rager reviews samples with 23-year employee Jim Dressler.

needed to eliminate any subjectiveness in the process,” he says. He feels that this numbers aspect of certification is the most visible, verifiable element to potential customers. “It is not enough to simply install certification. We must assure continued compliance to maintain credibility, a second and more important measure of value to our customers.”

CSI’s initial certification effort was designed to foster an exchange of information of mutual interest by members following the guidelines set in the Code of Ethics. While this approach offered an opportunity to share best practices, it lacked the credibility the design community required.

Listening to their customers, the CSI board decided to use third party inspectors for the certification process. “Although that approach is more expensive, dollars should not drive decisions that affect the reputation of our association and its members,”

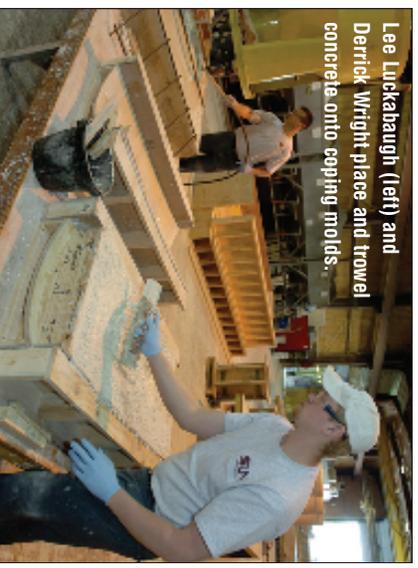
says Fry. Members must also undergo the process every two years.

The entire group did not welcome the decision to require certification as a membership requirement. When CSI leaders initially announced the requirement, some former members failed the inspections. Others have opted to not make the investment of time or money to comply with the requirements.

While Fry recognizes their decision to leave as an unfortunate byproduct, he believes the exodus validates CSI’s motive for certification. “Rules without enforcement do not accomplish anything worthwhile,” he explains.

While the certification program may now be reaching its zenith of participation while he is president of the group, Fry credits the current success to previous leaders such as Tony Garcia and Lepisto who adopted and implemented the policy.

And as the design community embraces certification, CSI expects moderate growth as design firms use their standards as the benchmark of



Lee Luckabaugh (left) and Derrick Wright place and trowel concrete onto coping molds.

quality. “Fortunately, this resulted in renewed interest by producers to become members,” says Fry. **TCP**

—Visit www.caststone.org to learn more about the Cast Stone Institute’s Code of Ethics. For more on the producer in this story, visit the Web site www.sunprecast.com.