Precast concrete in architecture

Sarah Fister Gale

Lucien LaGrange isn't the typical precast concrete industry icon. As an architect, LaGrange doesn't work in the precast concrete industry, nor is he a member of PCI.

He is, however, one of the most outspoken proponents of precast concrete as a flexible and cost-effective choice for high-end design applications. "Most architects don't realize what can be done with precast concrete," he says.

LaGrange was born in Paris, France, in 1940, a place he calls "the city of stone." In 1947, when the Germans occupied his hometown, his parents moved to Provence, an area of France known for its beautiful landscapes and limestone quarries.

LaGrange fell in love with the classic stone architecture of his youth, but it wasn't until he attended McGill University in Montreal, QC, Canada, in the 1960s, that he discovered precast concrete. "At the time, Montreal had a very large precast industry, more so than other cities, and the technology was very advanced," he says.

After finishing his degree in architecture and spending a few years working in Canada, he came to Chicago, Ill., where he joined the firm of Skidmore, Owings & Merrill (SOM) in 1978. Over the ensuing seven years, LaGrange worked with SOM on a broad range of projects, including 40-story skyscraper towers, a 5 million ft^2 (500,000 m^2) property in Los Angeles, Calif., and many hotels, transportation centers, apartment buildings, and parking structures. Then in 1985 he left SOM to start Lucien Lagrange Architects, a Chicago-based firm known for designing classically inspired high-end residential buildings that reflect the intricate detailing of architecture from the 1920s. "We want to restore that period of classical design and provide a more ornate look," he says of his firm's aesthetic.

Throughout his career, LaGrange has incorporated precast concrete into many of his structures to achieve the classic designs and elegant detailing that his clients have come to love without breaking their budgets.

"This is what is so great about precast," he says. "When you use stone you can't always afford a lot of detailing, but with precast you can create as much detail as you like and the finish looks just like limestone."

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Some of his most notable precast concrete projects in Chicago include the luxury 60-story Elysian, a hotel and residential tower that employs architectural precast concrete panels to create a richly articulated entry courtyard, and the 67-story Park Tower, which is one of the tallest buildings in the world to be clad with architectural precast concrete panels.

Precast concrete is also a smart choice for the tight urban environment in which most of his projects reside, he says. "We've had no problem bringing panels into the city and maneuvering them, and that method keeps the site much less congested."

Despite the many benefits that LaGrange has achieved with precast concrete as an architect, he says that few of his contemporaries use precast concrete the way he does, in part because they don't understand how versatile it can be. They also don't have the necessary relationships with precasters who can help them understand how it can be applied in their designs, he says. "It has to be a team effort."

He encourages PCI members to reach out to architects to educate them on the benefits of precast concrete as a design material and to show them how their teams can work together to realize their aesthetic and budget goals.

"Architects don't know how precast works, so it is up to precasters to show them."