## Precast by design

Sarah Fister Gale



Born and raised in Iowa, David Dieter spent his early days playing football and running track. After graduating from high school, he attended the Hawkeye Institute of Technology in Waterloo, Iowa, to get an associate degree in civil engineering.

He might have stayed in Iowa and

built a career, but he headed west instead, transferring to the University of Nevada in Las Vegas, where he studied architecture and engineering. He liked both areas of study but found himself drawn to the construction side of the business. When he completed his degree in civil engineering in 1990, Dieter landed a job working for a general contractor in Las Vegas.

He worked on a few small projects and eventually met Andy Curd, head of A. T. Curd Builders, a precaster and erector headquartered in Glendale, Calif. "Andy was from Nebraska, and we got along," Dieter says. Curd was in Las Vegas working on a project and asked Dieter if he would be interested in helping him build a hotel.

Dieter took the job, which turned out to be precast concrete construction on the MGM Grand Hotel. It was his first experience on a precast concrete project, and it changed the course of his career. "We produced more than 15,500 pieces in the field and erected it in nine months," Dieter says. "It was amazing."

The project included 12 ft (3.6 m) wide hollow-core slabs for the floors and ceilings, which eliminated visible seams in the ceiling, along with internal walls and external spandrels. Working two shifts, the crews turned over a floor every day. "For a project done 30 years ago, it was pretty innovative."

Dieter went on to work on more iconic Las Vegas projects, including the Stratosphere hotel (now known as The Strat), Caesars Palace, and the 1200-acre (486 ha) Las Vegas Motor Speedway. "I cut my teeth on big projects," he says.

Through the work, he discovered that he liked the precast concrete design and production side of things more than the construction. "In construction, you have to know a lot about a lot, but you don't specialize in anything," he says, but as a plant manager he got to dig into the details of what precast concrete could do and how it could be used.

He also loved the community he found in the precast concrete industry. Dieter recalls attending a seminar on safety in Las Vegas hosted by Sid Freedman, the retired director of architectural precast concrete services at PCI. "It was so cool how everyone came together," he says of the event. "It inspired me to learn more about the industry."

Dieter joined PCI in the late 1990s. Initially he only attended the conferences, but when he was hired as president of Midstate Precast in Corcoran, Calif., in 2005, he saw it as the perfect time to get more involved.

Dieter joined the Research and Development Committee where he worked on a collaborative research project to develop the *Seismic Design Methodology Document for Precast Concrete Diaphragms*. The project was funded through a grant from the Charles Pankow Foundation with additional support from PCI and the National Science Foundation. "It was an exciting project," Dieter says. The research looked at the development and design of untopped precast concrete diaphragm systems for high seismic zones. As part of the project, he helped build a shake table to mimic the impact of seismic activity on precast concrete structures.

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The project won the 2016 American Society of Civil Engineers (ASCE) Charles Pankow Award for Innovation and helped inform updates to the seismic design code. "It was a great time to be involved in PCI," he says. "It's amazing what you can accomplish with a little seed money and a lot of young people eager to make a difference."

Dieter also spent several years as chair of PCI's Business Performance Council and served on the PCI Board of Directors. He was named a PCI Fellow in 2011.

Since 2019, Dieter has been CEO of NAPCO Precast in San Antonio, Tex. In his free time he enjoys backpacking, bicycling, and spending time with his family. He has been a leader in Boy Scouts and a member of Rotary International.

The fellowship Dieter found among PCI members has been an ongoing benefit of his participation. "It makes you feel like you are part of something bigger than just one company," he says. "And if you ever have a question or need help, you can always reach out to someone you met through PCI. That's an incredible opportunity to grow your career."