Engineer: the word itself often conjures up amusing images of pocket protectors, aquarium-thick glasses, or words that nobody but the engineer understands—you know the type. Today, many structural engineers in particular are involved in concrete and shotcrete projects.

These are the guys who tell YOU, despite all your experience working in concrete and shotcrete, what their engineering books and computer programs tell them you need to keep your projects standing through a myriad of stresses due to nature and the laws of physics. Often known to be stubborn, engineers have clashed with designers and builders since the evolution of engineering.

As the largest engineering firm in the nation specializing in pools and backyard features, Pool Engineering Inc. strives to embody the exact opposite of the tunnel-vision, book-trained engineer.

Founded in 1992 by Owner and President Ron Lacher, PE, CBP, Pool Engineering Inc. has risen to become a leader in the swimming pool industry by truly understanding how swimming pools come together from the ground up.

Though trained as a civil engineer, Lacher began building swimming pools early in his career and over the course of the next decade, created one of Orange County, California’s most respected pool construction firms.

In the early 1990s, seeing a need for better service in the small niche that provides structural engineering services for pool builders, Lacher started Pool Engineering Inc.

Now, nearly two decades later, Pool Engineering has a staff of 18, including five licensed civil engineers, that provides structural engineering for over 100,000 swimming pools in California, Washington, Oregon, and Arizona, as well as thousands of structural designs for related backyard structures such as retaining walls, patio covers, decks, and fireplaces.

Known for its extraordinary customer service and a staff very knowledgeable about construction, Pool Engineering has simplified the structural engineering process for swimming pools by standardization. Hundreds of plans for pools and other landscape features have been developed simplifying permit attainment for most pools. Also, Pool Engineering has custom design teams that crank out pool builders’ wildest custom creations, from elaborate grotto waterfalls that would make Walt Disney himself envious to patio cabanas large enough to dwarf the Taj Mahal.

What clients appreciate the most, however, is that Pool Engineering understands not only what contractors go through in the field but also how to help them develop practical solutions that are economical to build and strong enough for the tough building codes in the seismic areas of the western U.S., yet aesthetically pleasing enough to satisfy the pickiest Beverly Hills homeowner. This dedication to its customers is what makes Pool Engineering Inc. the remarkable success it is today.

Standardized, proven designs for the typical backyard pool based on the experience of over 100,000 installations
Corporate Member Profile

Experts in structural design and hydraulics for vanishing-edge pools

Complicated structural designs based on experience from installing over 100,000 pools

Structural designs for difficult locations