

**PROJECT FOCUS**

# Indoor Pool with Slide & Waterfall

Captures Feel of Tuscany in Elegant Setting





*The waterfall floor is framed out, corrugated steel installed and rebar reinforced to support the waterfall and slide structure. There are structural steel beams below the support framing.*

**LOCATION:** This indoor pool is located in a northern New Jersey town and was honored with a Gold Medal in the Northeast Spa & Pool Association’s (NESPA) 2007 Design Awards Competition in the Outstanding Achievement in Design & Building—Concrete category.

**BUILDER:** The project was designed and constructed by Creative Master Pools, Inc., 410 Ringwood Avenue, Pompton Lakes, New Jersey, which is owned by Ron and Ruth Aveta. Ron got into the pool business 30 years ago to satisfy two of his passions—to build “things” and to find an outlet for his creative flare. Pool building, with its infinite variety of design, concept, setting, materials use and engineering challenges, meshed well with his talents as is readily apparent in the beautiful indoor pool pictured on these pages.

Many years ago, Ron took a summer job with a swimming pool builder. “The builder that I was employed by did great work and I felt that this was an industry where I could excel as well. Besides wanting a business where I could build and be creative, I needed a third element—to have fun. For me, pool building is fun. I was with that builder for 10 years and then went into my own business.”

When the Avetas went into business for themselves, their first company was called R.J. Aveta Inc. The company started out as a pool builder, but the Avetas soon found that they needed a service division as well to service the high-end pools they were building. They purchased a company



**ABOVE:** *Below the pool patio level, HVAC and dehumidification systems had to share space with the pool mechanical systems. The pool piping and HVAC venting had to be installed in coordinated phases for each to be optimized and operate efficiently.*

**BELOW** *All piping had to be strapped, bolted and supported properly to minimize noise below the pool patio level. This mechanical room is directly below the lounge seating area of the pool patio.*

called Creative Pools. Ron had joined an organization called The Master Pools Guild (as well as NESPA) and as he developed his master pools skills, he wanted it reflected in the name of the company. They changed Creative Pools to Creative Master Pools. “The Master Pools Guild is a brotherhood of people like me who have dedicated themselves to the betterment of the pool business,” he said. “We want everyone in this business to be professional and we are always striving for a better product for the customer.”

Creative Master Pools today employs 30 people in the building and servicing of pools and spas. Creative only services pools it builds. This business model apparently works well for the company because many of its clients have been with it for 25 years.

**PROJECT PARAMETERS:** This indoor pool required a high level of coordination between the home builder (who was also the homeowner), the architect and Creative Master Pools. After more than 100 hours of meetings on concept and design, it was decided that a 16-ft by 35-ft pool would be constructed with a rock waterfall and slide as the grand focal point that would fit into the pool building, which was designed at 36 ft by 65 ft. The ceiling height was

set at 16 ft so that an adult would not hit his/her head standing near the top of the slide/waterfall. The pool would be 595 square ft, which would hold 21,200 gallons of water. It would be six-ft deep at the deep end and 3’6” at the shallow end. The spa would be 7’ by 5’5” or approximately 40 square ft. The homeowner did not want a spillway going from the spa into the pool. Instead, water overflows would be hidden in the walls and flow into the pool.

This indoor pool is gunite, shot inside of a framed pool room in the pool building. The waterfall and slide area are framed out with corrugated steel and then, reinforced with rebar to support this structure. Structural steel beams are installed below the support framing.

The pool and its mechanicals are accessible from a room below pool level so that when repair and replacements need to be made in the future, none of the beautiful rock work or expensive detailing needs to be disturbed at pool level. Below the pool patio section, HVAC and dehumidification systems share space with the pool mechanical systems. The pool piping and HVAC venting were installed in coordinated phases for each to be optimized and operate efficiently. All piping had to be



strapped, bolted and supported properly to minimize noise below the pool patio level. (This mechanical room is directly below the lounge seating area of the pool patio.)

The waterfall floor and slide installation required working in a very tight space with restricted headroom. The slide was designed in such a way as to give enough rise, length and turn to fit into the tight space. Waterfall boulders are set on each side of the slide, inside the confines of the block walls. Waterproofing all water movement areas was necessary to avoid losing water. The floor had to be set at an elevation that allowed access to the automatic cover located in a vault under the waterfall. Custom stonework was designed to line the block walls before the waterfall boulders went in. Waterfall boulders were installed inside the stone walls. Conduits for fiber optic lighting were installed in specific areas to optimize the evening look of falling water.

The customer did not want the automatic cover accessible to the children in the family as they sat on the pool steps, so it was carefully concealed. Hand-cut stone veneer was installed on stainless steel plates, which were installed vertically to hide the access into the automatic cover vault underneath the waterfall. The stonework on the plates linked together to hide the joints. Further, an adjustable system of stainless steel toggle fittings was designed to make these stone plates removable to access the automatic cover behind for service.

The interior walls of the pool building are real stucco painted in a color reminiscent of Tuscany. The finished waterfall surrounds the slide, seeming to fall out of old Italian walls and to be the focal point of this outstanding project. A jade colored pebble finish plaster brings color to the pool water, since there is no sky to offer reflection. Balance is achieved by using shapes, textures **and colors that complement each other, allowing the waterfall to draw the eye.**

**BUILDER COMMENTS:** “One of the challenges was installing the cov-

er, which at the customer’s request was an auto cover that needed to be hidden in a box under the waterfall. Our solution was to install 24-inch long by 12-inch high stainless steel plates with real stone epoxied to them. The plates were designed to be removed so that the auto cover is serviceable. Even on close inspection, it is impossible to tell that there are joints because the stones overlap the plates. The slide,

waterfalls and steps are cantilevered over this area.

“We had a little challenge on the stone. We had numerous conversations with the homeowners on how the stone would look. About five days into the stone work, the homeowner decided she did not like the stone. We stopped work and did a couple more mock ups. We had to rip out the stone and re-do it. The homeowner loved the

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new stone and, indeed, the whole project. I work with great craftsmen and all of our projects are quite emotional to us, but we got over having to tear it down and we built a great project. The rock from the waterfall is Sussex Moss. The stone around it is Rainbow stone. It is practically a type of sandstone out of the Tennessee area. The homeowners wanted a Tuscany look to the project and those stones matched their conception of what would look like Tuscany.

“The way we designed and constructed the pool, you can walk around the perimeter in the basement so that all future repairs can be made from

there. The pool is practically at ground level. After the footings were poured, a vault was built to hold the pool. It is a vessel inside of a vessel. Then, we shot the gunite inside of that vessel on top of the three-quarter inch stone to bring the elevation up. Everything else is built inside of that vessel.

“In the pool room, it is all real stucco. It is all hand-applied stucco on all of the walls. A rough coat was applied to the walls and then we came in and did our finished stone work. Then, after plastering and everything else was done, they did the final coloring on the walls. To put in the initial base coat for the stucco, there was a stage built over

the pool so that the scaffolding could be placed on it to reach the barrel ceiling and other areas.

“Besides being able to service the pool from the room below it in the future, if there ever is a catastrophic water live break or pool failure, the room below the pool can contain the water so that it does not flood the house. The water is released into the town sewer system. There are dam walls built in front of the windows to make sure that the water would never go outside of that room.

“The job took six months. Because we work 12 months a year, we like to schedule our indoor finishing work for the cold months.” |