

Case Study:

Swift Creek YMCA – Chesterfield, Virginia

Williams Induction Lighting Solves Technical Challenge for New YMCA Indoor Pool Facility



Job Specific Information:

- Fixture and Quantity: 41 H.E. Williams ICEAL1 surface-mounted luminaires equipped with 150-watt induction lamps and remote ballasts.
- Mounting Height: 22 feet
- Spacing: Irregular, but typically 12-14 foot intervals
- Lamp Life: Williams induction fixtures will operate up to 25 years, based on an average operating time of 10 hours per day. After 60,000 hours, the ICETRON lamp still delivers 70 percent of original lumen output.
- Light Output: Between 45-48 maintained footcandles on pool surfaces
- Color Rendering: Induction lighting delivers an 80 CRI (color rendering index), which makes indoor spaces look truer and brighter than those lit by metal halide, high-pressure sodium or mercury vapor lighting.
- For complete ICEAL specifications, visit www.hewilliams.com



uniform,”Worley said. “And, reflective ceiling surfaces tend to decay over the years and look dingy, so it’s not the best overall solution.”

Faced with that challenge, Worley recalled a tabletop demonstration of induction lighting provided by Thomas Harris & Co. in Mechanicsville, Va. After a follow-up call to outside sales representative Steve Clarke, the pair agreed that Williams’ induction luminaire was a great solution to the technical dilemma.

“Many times, the issue in YMCAs and other indoor pool facilities is getting enough light on the pool area, while still being able to maintain the fixtures,”Clarke said. “In this particular job, most of the induction lighting was designed to be over the pool, but the ballasts are over the pool deck. So, if anything happens with the ballast, they can access it with a lift on the side of the pool.”

Worley and YMCA leaders became comfortable with overhead pool lighting when they learned more about how its remarkable lifespan could minimize maintenance headaches. The Williams Outdoor ICEAL area lighter, equipped with Sylvania ICETRON electrodeless lamps, is designed to operate for up to 100,000 hours – up to 10 times longer than standard HID fixtures. In addition, Williams induction lighting comes on instantly, eliminating the need for lengthy warm-up periods.

Long lamp life wasn’t the only key benefit delivered by the Williams ICEAL area lighter.

Due to the building’s radial entry and the use of colorful fabric acoustical panels along the pool area ceiling, Worley said the fixtures had to be installed in an irregular pattern.

Even with that challenge, the Williams lighting not only delivered even illumination, but up to 48 maintained footcandles on pool surfaces – slightly above project specifications.

When the new YMCA opened to highly positive reviews, the applause was for the design and great features provided in the facility. But in the background, Worley said the Williams luminaries were quietly delivering a top-notch performance.

“The pool area lighting is not very obvious, which is great, because it helps bring out all of the other design features – rather than having lighting that visually screams to be the main feature,”he said.

The Swift Creek YMCA offers something for anyone interested in family health and fitness. The new 45,000-square foot facility, which opened in fall 2012, offers a full array of workout options, including weight training, cardio machines, basketball courts, and group exercise zones.

But the centerpiece of the new structure – a 10,000 square foot natatorium featuring an indoor swimming pool – presented some challenges to architect Ron Worley and his design team. For example, the YMCA’s management team wanted uniform, relatively high light levels for the pool area, while also preserving some level of energy efficiency. That meant Worley would not be able to use an indirect lighting solution in place at similar facilities nearby, which were powered by lower-efficiency, 400-watt metal halide fixtures.

“Clearly, that was an older technology, and throwing the light across the water meant that the illumination levels would be less