

Project Report

Club One

Chester, Maryland, USA

Pre-engineered Natatorium

Architect: Smolen Emr Ilkovitch Architects



Testimonial

“The corrosion resistant pre-engineered aluminium system is a great benefit”

David Almy, Aquatics Specialist at SEI



Club One | Chester, Maryland

STRUCTURES UNLIMITED SPECS:

Pre-engineered Natatorium

Center Ridge Enclosure

Aluminum Box Beam Frame:
6.375" x 16" | 160 mm x 400 mm

Aluminum Finish: KCRF™ white #00

Size: 80' x 126' | 24 m x 38 m

KALWALL PANEL SPECS:

Panel: 2.75" | 70 mm

Grid core: shoji thermally broken

Exterior FRP: white

Interior FRP: white

U-Value: 0.14 | 0.80 W/m²K

Solar Heat Gain Coefficient: 0.14

Visible Light Transmission: 9%

PROJECT CREDITS:

Architect: Smolen Emr Ilkovitch

Aquatics Specialist: David O. Almy, RA

MEP: Mendoza Ribas Farinas + Assoc.

Pool: Paddock Swimming Pool Company

WHY STRUCTURES UNLIMITED?

Single source turnkey solutions include:

Technical sales consultations

Estimating + budgeting services

Daylight modeling services

Design + engineering services

Drafting + modeling

Project management

Precision fabrication

Professional installation

ONE SYSTEM FOR ALL

When the owners of one of the leading fitness centers along Maryland’s Eastern Shore were looking to add an aquatic center, they wanted something that would provide their members with a variety of experiences.

Structures Unlimited, Inc., working with SEI Architects of Rockville, MD, provided the single-source solution with an 80’ by 126’ pre-engineered structural aluminum swimming pool enclosure. The facility includes a six-lane 25-yard competition pool, warm water leisure/therapy pool and a kid’s pool with slide and beach entry.

Structures Unlimited, having earned a reputation for being efficient and dependable, designed, manufactured, delivered and installed a pre-engineered aluminium frame pool enclosure system featuring a Kalwall® translucent panel roof system with two openable roof systems.

In addition to a low solar heat gain coefficient, the Kalwall panels provide a safety solution for pools. Glare from glass can be dangerously disorienting as polarized light reflects on surface of water. In contrast, Kalwall translucent sandwich panels offer glare-free diffuse natural daylight, eliminating veiling reflection and allowing lifeguards to see to the bottom of the pool lanes.

The retractable roof systems help create an atmosphere that allows the facility to be operated as an outdoor pool in spring, summer and fall and as an indoor pool in winter months, providing significant reduction in ventilation, cooling and dehumidification energy costs. Ample daylight reduces the need for electric lighting during the day. HVAC system interface is available to lock out the air handler when the retractable roof is open.

SEI worked with Club One to develop a facility that would not only meet the needs of club members, but also the surrounding community by serving local high school swim teams as the only indoor pool in Queen Anne’s County. In addition to the pool enclosure, a separate space was built with function rooms and fully-equipped locker rooms.

David Almy, Aquatics Specialist at SEI, has been working with Structures Unlimited for 25 years.

“I first worked with Structures Unlimited in 1994 and would certainly use them again if the opportunity presents itself,” Almy says. “The corrosion resistant pre-engineered aluminium system is a great benefit. The quality of light under a Kalwall panel is soft and diffused without glare, which is very important in a natatorium.”

