PROJECT PROFILE

The 37,500-square-foot Dimond Park Aquatic Center in Juneau, AK boasts two swimming pools, a dry heat sauna, a workout area and a whirlpool. The lap pool, sometimes used for competitive swimming events, is maintained at 82° F, while the leisure pool is kept at 89° F and the sauna is maintained at 170° F. This created unique thermal efficiency challenges, particularly in the cold Alaskan climate, and therefore the perfect opportunity for use of high-performance SYNTHEON ACCEL-E Steel Thermal Efficient Panels.

The project manager for the City and Borough of Juneau, Catherine Wilkins, calls ACCEL-E wall system “absolutely a terrific choice” for the project. “It’s helping to keep our energy costs where we want them to be,” says Wilkins.

ACCEL-E wall system is the result of a proprietary manufacturing process that combines the strength and performance of cold-formed steel framing with the superior insulation properties of expanded polystyrene (EPS), and provides the optimal solution for the swimming facility’s efficiency requirements.

SYNTHEON SOLUTION

ACCEL-E panels dramatically reduce construction time, labor, and cost, while providing excellent thermal efficiency – all critical factors in the construction of Dimond Park Aquatic Center. “One of the primary design objectives was that the system provide a consistent thermal envelope,” says Wayne Jensen, of Jensen Yorba Lott, Inc., architect of the facility. “Installation was very fast and the building was enclosed quickly. The product was well manufactured and fit well onsite. The manufacturer’s support was good both during design and construction.”

Catherine Wilkins
Project Manager,
City and Borough of Juneau

“I personally was extremely impressed by how fast the wall system was installed. The folks at SYNTHEON planned this project very well, down to every small detail.”

PROJECT FACTS

SIZE: 20,000 square feet
PURPOSE: Swimming facility
MAXIMUM WALL HEIGHT: 31 feet
PANEL DEPTH: 8 inches
WALL TYPE: Non-load bearing infill and bypass walls
OWNER: The City and Borough of Juneau, Alaska
ARCHITECT: Jensen Yorba Lott, Inc.
CONTRACTOR: McGraw Custom Construction, Inc.
The ACCEL-E wall system owes its advanced thermal capabilities to EPS insulation that is factory-formed and mechanically fused to the specially design slotted stud – virtually eliminating thermal bridging. And unlike batt insulation, EPS is unaffected by moisture and provides a powerful vapor barrier in any climate zone – a particularly useful feature for the aquatic center.

CONSTRUCTION EFFICIENCY

ACCEL-E takes an unprecedented approach to the way exterior walls are built by reducing framing and insulating processes down to a single step. ACCEL-E does not require architects to change the way they design walls or limit choice in exterior cladding types, nor does it require contractors to learn new construction methods or invest in specialized equipment. The easy one-step installation process also means that buildings can be dried-in in a third of the time, allowing interior trades to commence work sooner.

Catherine Wilkins was also struck by the speed and ease with which the ACCEL-E panels were installed.

“We have been very pleased,” says Wilkins. “I personally was extremely impressed by how fast the wall system was installed. The folks at SYNTHETON planned this project very well, down to every small detail. Their part of the project required a minimum of field adjustments.”

Chuck McGraw, general contractor with McGraw Custom Construction, says he had not previously worked with ACCEL-E, but now would “recommend it to anyone, especially when insulation R-value is an important consideration.”

“It was excellent, flawless, very simple,” says McGraw. “Seamless and simple. ACCEL-E reduced our installation time by 75 percent over a conventional wall system, and that improved my labor margin tremendously.”