ACTION FLOOR COMPLETES UNIQUE PROJECT AT GEORGIA TECH

A high-performance ActionThrust I hardwood sports floor system from Action Floor Systems was the final touch in a most unusual recreation center project at Georgia Institute of Technology in Atlanta.

The new $45 million Campus Recreation Center at Georgia Tech was created from the former open-air swimming and diving venue for the 1996 Summer Olympics. The facility was enclosed, and a new concrete slab was stretched high above the 175-foot span above the existing pool and spectator seating areas. To do that required constructing the longest span ever used for an interior concrete structure.

This unique project was conceived to keep two key elements, the Olympic pool and the roof 109 feet above it that was covered with solar panels. Those panels were part of a 25-year research project being conducted by Georgia Tech, Georgia Power and the U.S. Department of Energy. Everything else about the facility was obsolete and wasting precious space. The roof was built so high above the pool to accommodate thousands of spectator seats, but most of those were removed after the Olympics. Meanwhile, the school faced the same challenge as other major colleges to provide top-notch student recreational facilities.

The school “found” 47,800 square feet of rec center space by adding the floor 65 feet above the pool. But they didn’t want students using it to feel any vibration or structural movement. The engineered solution arrived at through a design-build approach by the contractor, Skanska USA Building, Inc., and architects Hastings & Chivetta: steel girders 30 inches wide by 13 feet deep, supported by some 7,000 cubic yards of concrete and 60 miles of cable. With that amount of concrete, it was almost inevitable that some would sag, and the bids for sports floor contractors included dealing with level variances as great as 1-7/8” in places. The last thing anyone wanted was to add the weight of additional concrete.

“Some competing dealers said you couldn’t shim the floor that much with a floating floor system,” said Chet Fuller of Pro Sport Floors, Inc. of Englewood, FL. “You really need to know what you’re doing. We also had to fit it under 29 doorways heading off the gym.” Pro Sport, who works exclusively with Action Floor Systems, had prior experience with other projects of this magnitude, although level variances of less than ½” are much more common. The scope of the project provided other challenges as well.

“It took us a week just to unload all that maple flooring and take it up the elevators,” Fuller said. “It was four semi loads, and we couldn’t stack it because of weight concerns.” His father Walt, who oversees installations, said it was “the type of job that separates the men from the boys. It was a challenge.”
Walt built a sample of the ActionThrust I system, which is suspended over ¾” pneumatic natural rubber pads, to demonstrate the system’s superior performance to Georgia Tech officials. They knew they wanted a wood floor, and after the system demonstration were convinced the ActionThrust I system was the absolute best choice.

“They really wanted a softer, more cushioned floor because part of it was for three aerobic rooms for things like martial arts and dance, and they also wanted resilience for the six multi-purpose basketball courts,” Walt Fuller noted. “I’ve worked with other flooring manufacturers, and I really think ActionThrust is the ideal floor for this kind of facility. It’s a huge difference with those ¾” ProFlex and AirFlex natural rubber pads under the subfloor. Action floors also look real good, with consistent maple coloring, so you don’t get that blotchy look on the finished floor.”

The ActionThrust 1 system from Action Floor Systems consists of two layers of plywood subflooring with either the ¾” ProFlex or AirFlex natural rubber pads affixed to the bottom, and maple flooring attached to the top. The system is specifically designed to provide shock absorption, ball rebound, deformation and peripheral control.

It’s doing all of those things at Georgia Tech, where Phase 1 of the new Campus Recreation Center opened Aug. 18. Phase 2, another section of the center, is nearing completion.

“The students are ecstatic about the wooden floor because our old recreation center’s floor was synthetic,” said Butch Stanphil, director of campus recreation. “And it definitely looks good.”

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