Value Engineering Yields Cost Savings with Dryvit EIFS at the BI-LO Center in Greenville, S.C.

Arena fever seems to have gripped many cities in the United States. Some cities are building new arenas for expansion teams in professional sports, and others are trying to increase tourism by creating a forum to attract better entertainment. Some places are even revamping existing arenas to accommodate more patrons and provide the latest comforts associated with today’s newer, high-tech facilities.

For 20 years, the city of Greenville, S.C., has anticipated building a multi-functional arena. In August 1998, the anticipation ended. Greenville’s $63 million BI-LO Center was completed and opened the doors for the first event in September. Capable of seating some 16,000 people, the center is home to the East Coast Hockey League team, the Greenville Grrrowl. The center is also being used for concerts and hopefully basketball games ranging from the NCAA’s Big 10 to NBA exhibition games.

Panels Are EIFS

The unique design of the center is
reflective of many of the dome-type stadiums seen in major metropolitan areas. The exterior of the upper portion of the center consists of 144 prefabricated exterior insulation and finish system panels. The large Brite White panels made of Outsulation® are manufactured by Dryvit Systems, Inc. and were custom made for the BI-LO Center by Bonitz Manufacturing Company Inc. In all, there is 33,000 square feet of EIFS panels on the upper portion of the arena.

“We like what we see,” said Mike Delano, Fluor Daniel’s engineering manager for the project. “We have received many compliments saying the color and texture look good.” With more than $12 billion in revenue, Fluor Daniel is one of the largest construction firms in the world.

Bonitz™ Contracting Company, Inc. has teamed up with Fluor Daniel to help complete a variety of components on the BI-LO Center. Founded in 1953, Bonitz is organized into four wholly-owned businesses to provide contracting services in each of the eight market areas in the Carolinas and Georgia.

Bonitz started using exterior insulation and finish systems manufactured by Dryvit Systems, Inc. in the early 1970s. In 1979, the company did its first prefabricated EIFS panel job on a three-story architect’s office in Columbia, S.C. Today, prefabricated panels are an important part of a range of services offered by Bonitz, and panelization has become a common method of exterior construction in large commercial projects using EIFS.

**EIFS Wins Over Concrete**

The original plans for the BI-LO Center called for pre-cast concrete panels and not EIFS panels. Because the decision was made late in the process to use the EIFS instead of pre-cast, the steel framing had already been fabricated to support the pre-cast concrete panels. In the final analysis, by using EIFS panels at 8 pounds per square foot as opposed...
to pre-cast concrete panels at 75 pounds per square foot, the load was reduced on the steel framing and did save in total tonnage. The cost savings, by going with EIFS as opposed to pre-cast concrete, were also a factor in choosing EIFS for this particular project. Financially, with low maintenance requirements and the proven durability of the EIF system, EIFS made more sense for the BI-LO Center project in the long run.

The design of this unique structure takes into account seismic movement. The steel in the structure is capable of moving to account for movement in the earth’s surface, and each of the Dryvit panels has 3 1/2-inch joints designed to work with the building. Instead of being welded, each panel was attached with steel pins 1 inch thick and 6 inches long, at the top and the bottom of each panel. The unique attachment method was designed specifically for the project by the engineering services at Bonitz.

Given a 20-day schedule to complete panel installation on the upper portion on the BI-LO Center, Bonitz installed all 144 panels in 15 days. “The panels went up fast,” said Fluor Daniel’s Delano, “and we stayed right on schedule.”

While a time-efficient installation is important, so is quality. Bonitz’s commitment to quality is best described in their mission statement: “Bonitz will continue to provide quality products and service in a manner worthy of the highest level of customer confidence and satisfaction and will maximize efforts to remain customer centered and goal oriented.”

While the prefabricated panels make up most of the Dryvit used on the project, there are many other areas of the center with field-applied Dryvit EIFS. Those areas include all of the soffits and main entryways; the service entry facade is a combination of Dryvit and brick.

Prior to the opening event at the BI-LO Center, the exterior was washed
thoroughly by Metro Clean, a new wholly-owned subsidiary of RPM (Dryvit’s parent company). The BI-LO Center’s exterior developed a dusty, red clay buildup created during landscaping and post-construction activities. Metro Clean, purchased by RPM last summer, is ideally suited for EIFS cleaning. Traditional cleaning methods use standard high-power water-blasting techniques to clean building exteriors, Metro Clean Systems offers a low-pressure solution that will not harm the existing laminas, caulks or sealants.

With a firm commitment to quality by Bonitz, Fluor Daniel and Dryvit Systems, Inc., the BI-LO Center is now a thriving events center in Greenville, S.C. 🏖️