CHALLENGES

Like all new building projects, there were several issues faced by the team constructing this mixed-use development in Kalamazoo, Michigan. Budget constraints and potential design changes forced the contractors to look at systems that could smartly resolve these very real challenges.

When a value-driven redesign did occur, and the project was moved to a cold-weather, winter construction, the team knew that the spray foam insulation would no longer be an option. They needed a way to dry in the building, make up lost time, and meet the latest, most progressive building codes.

SOLUTIONS

Advanced Architectural Products was able to fill the need for an efficient, cost-effective and code-compliant solution by providing the SMARTci™ system. With no weather-dependent installation restrictions, the combination of GreenGirt™ and custom-profiled polyiso insulation panels easily replaced the planned spray foam insulation, helping regain critical lost time in the schedule. The all-in-one system eliminated several trades on the job, saving even more on labor and decreasing critical path delays. These valuable additions acted as a contingency for the construction manager, where previously there was none.

The versatility of SMARTci allowed masonry ties to fasten directly to the GreenGirt™, saving 1-2 passes around the building. Multiple types of cladding and fasteners were attached to the structural substrate with no added furring. Interior wall condensation was eliminated—no need to wait for drying—before closing and finishing the interior.
RESULTS

- SMARTci™ saved money by reducing the stud size and removing the need for cavity insulation and exterior gypsum sheathing
- Less trades were involved, speeding up the schedule and eliminating costs
- The building interior dried faster, allowing crews to resume work sooner
- SMARTci™ created a highly efficient thermal barrier, drastically reducing heating costs
- GreenGirt™ allowed for several diverse cladding types—masonry and stone

PROJECT SUMMARY

SMARTci™ System with GreenGirt Simple-Z™ 250 & 2.5” Polyiso Insulation on Open Metal Framing w/ Masonry & Panels
- Downtown Kalamazoo, Michigan
- Retail Suites & Luxury Lofts
- 130,000 square feet
- New construction, 4-story building
- I-A / II-B Construction Types, S-2 Parking / R-2 residential / A-2 Assembly

The images at left of the same area show how SMARTci™ completely sealed the building and eliminated all opaque thermal bridging at the height of winter.
SMARTci™ is a continuous insulation system that can dramatically reduce the cost to heat and cool a building. The system is comprised of thermally insulated sub-girts, insulation and universal cladding attachments. It meets ASHRAE 90.1-2013 and ASHRAE 160-2009 codes. It can assist in LEED certification and utilizes green building technology, so it’s environmentally friendly, too!

Simply put, SMARTci makes buildings smarter.

WHAT OUR CUSTOMERS THINK ABOUT SMARTci™

“The SMARTci product dried in the interior of the building quicker, and in the middle of the Michigan winter! The system allowed me to run my portable heater at ½ power, with no condensation on the walls, and the real-time thermals proved that it was sealed. My other trades were able to move along without waiting, speeding-up the entire project timelines. The SMARTci™ system was very cost effective – outstanding product!”

- Greg, Construction Manager
  Cornerstone Construction Management

“After one day of training, the product went up with no issues. It was easy to install, scheduling was easy, and my crews were able to speed things along, decreasing my labor costs. The SMARTci System was extremely easy.”

- Bill, Installation Contractor
  Fowler Interiors

“The SMARTci System was easy to work with. We only made one pass around the building, attached our brick ties directly to the GreenGirt™, reducing our labor time. We got to the jobsite and did not have to wait for anything.”

- Gordy, Masonry Contractor
  Integrated Exteriors

“Over the years, I have seen a number of building products come to market claiming to revolutionize the construction industry with varying degrees of effectiveness. Once we examined the wide range of attributes and realized the implications of the SMARTci System, we were convinced that this product was a major step forward in building envelope technology.

The sales and technical team at A2P were great to work with in every way. They listened to our concerns coming from our architects and engineers and also to the concerns of the construction manager in a collaborative, “what is best for the project” approach. This is a product that we will continue to specify as we feel it provides an impressive cost to value return for our clients.”

- Michael, V.P. Architect
  Byce & Associates, Inc. Engineers & Architects