

# CASE STUDY: NAPOLEON HIGH SCHOOL RENOVATION



## CHALLENGES

The challenge presented at this high school renovation was to retrofit over three different types of substrates that were not aligned: CMU block, sheathed (plywood) open metal framing, and an existing brick veneer system. With the Michigan winter approaching, it was important to find a solution to install quickly and accommodate the sprayed foam insulation.

The customer needed an innovative product that would fit all three substrates, and allow easy, continuous attachment of the new metal panel system. It also had to meet or exceed the latest building codes and work with the existing architecture.

## SOLUTIONS

GreenGirt™ - an innovative product from A2P - was the answer the contractors sought. GreenGirt™ is a fiberglass composite z-girt that is structurally and thermally better than its steel counterparts. The highly-versatile GreenGirts™ fastened seamlessly to all three building substrates, unifying the plane for the metal panels, which attached easily and with minimal strapping. The metal panel contractors were able to install the girts quickly and kept the construction schedule ahead of the weather.



## RESULTS

- GreenGirt™ saved time and money by reducing the installation sequencing over multiple substrates: Brick, CMU Block and Sheathing
- GreenGirt™ decreased staging time, allowing for quicker installation and increased productivity
- Two trades were condensed into one, decreasing labor costs
- GreenGirt™ allowed for a single-pass application of spray foam, ahead of bad winter weather
- GreenGirt™ provided a highly efficient thermal sub-framing system with no thermal through fasteners



SMARTER BY DESIGN. PROVEN BY PERFORMANCE.

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.**

## PROJECT SUMMARY

**GreenGirt™ Simple-Z™ 300 Horizontal; Sprayed Foam Insulation on Sheathed Metal Framing, CMU and Brick Veneer Walls; Aluminum Composite Panel Cladding**

- Napoleon, Michigan, U.S.A.
- Public High School Facility
- 12,000 Square Feet
- Existing Building Renovation



**“The GreenGirt went up quickly and saved a significant amount of time on application. It met and exceeded the job specifications. The project was able to stay on schedule—one step ahead of the impending winter weather. The spray foam application was right behind them keeping up.”**

**- R.W. Mercer Company,  
Construction Management**

**“The GreenGirt™ was easy to work with while applying the sprayed foam insulation on the building’s exterior. We were able to keep up with the installers, with only one pass on the application. We trimmed excess from the girt faces, and the panels were ready to be attached. Great product!”**

**- Arisco Contracting Group,  
Insulation Contractors**

**“The GreenGirt™ installation was easy and fast. The sprayed foam insulation was applied and cured, then we were able to install ACM panels without a hitch. It saved a lot of time.”**

**- Wolverine Enclosures, Installation Contractors**

**“The SMARTci product met all of the expectations presented to our team. We are pleased with the outcome of the project and how easy it was to work with.”**

**- GMB Architecture + Engineering**



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