



SHEFFIELD METALS INTERNATIONAL FACILITATES THE INSTALLATION OF THE LARGEST SINGLE ARRAY, THIN FILM SOLAR LAMINATE ROOF IN OHIO

Photovoltaic technology generates enough power to run Mount Union College's two-story fitness facility

SHEFFIELD VILLAGE, Ohio - Mount Union College's Peterson Field House is now generating its own electricity, thanks to Sheffield Metals International (SMI). SMI recently facilitated the installation of a 66,000 square foot photovoltaic roof system that ranks as the largest single solar array, thin film laminate systems in the state of Ohio.

Currently, the amount of energy being collected and converted is completely powering the two-story fitness center, which houses an extensive number of electrically powered machines: 16 treadmills, 14 ellipticals, 16 flat panel televisions and many other appliances.

Though data related to total kilowatts generated is still being collected, the system is operating at a level that would power seven homes for more than a year, and is projected to offset a large percentage of the field house's total electrical operating costs.

Sheffield Metals Vice President of Business Development, Jason Watts, explained how the project's complexities were addressed through a distinctive integration of roofing products.

"Mount Union College was in a unique position because the school was conducting a number of construction projects simultaneously," Watts said. "The school was looking to not only re-roof the Peterson Field House and install some type of solar application, but it was also constructing a completely new addition to the building as well.

"To meet all of these needs, we presented them with a solution that included a retro-fitted roofing system for the existing field house, state of the art thin film photovoltaic solar panels and a new highly reflective roof system for the addition," Watts explained.

The three primary products used in the project were:

SOLR™: Photovoltaic solar energy standing seam roofing panels. Includes a 25-year warranty and an average 100 percent return on investment in 10 years or less.

TOPR™: Industry's most advanced retrofit framing system. An economical, efficient retrofit system that achieves lower labor costs and minimal business interruption and improves structural integrity.

COOLR®: A family of sustainable, energy efficient roofing products composed of pre-painted and acrylic coatings. Highly reflective, meeting EPA Energy Star Products performance criteria; proven to last more than 35 years with minimal maintenance; made of recycled content; and is recyclable.

Commercial Siding & Maintenance was the company that installed the products and President, Tim Lane, highlighted the congruity achieved between the products and the design scheme.

“The project was a perfect fit for the TOPR and SOLR products,” Lane said. “The TOPR retrofit roofing system enabled the new SOLR standing seam roof panels to indiscernibly transition between the existing structure and the addition. The result was a photovoltaic roof system that met the College's engineering, power generation and aesthetic requirements.”

Mount Union College Director of Physical Plant, Blaine Lewis, oversaw the Peterson Field House project and points out fiscal benefits to the new roofing system, as well as the social responsibility aspects.

“As an institution, Mount Union College is committed to actively implementing renewable energy practices,” Lewis said. “The realized financial benefits allow us to direct more funding toward education. But, the intangible benefit of a system like this is that it teaches our students to be socially responsible. Renewable energy works, and it is the right thing to do.”

Unique to this project was SMI's role in capitalizing on funding offered through the Ohio Department of Development's Energy Office. Specifically, SMI ensured that the project met all the necessary standards to qualify for Ohio's Advanced Energy Funds Grant.

“The state of Ohio is offering substantial grants to Ohio companies that implement certain energy saving elements into construction, especially solar energy solutions,” Watts stated. “Many business leaders are hesitant to apply for the grants because of the perceived detailed nature of the paperwork. With the Mount Union Project, SMI was able to manage the process and act as the primary consultant for the entire duration of the project. And, because of our knowledge of the grant requirements and filing procedures, the process was straightforward and seamless.”

Adding to the renewable energy benefits of the new system, Mount Union College will also be able to collect data from the system and utilize the information as an educational tool for both the Department of Biology and Department of Engineering.

Real-time, in-depth analysis of energy production as quantified through factors such as production by day, week and month can be viewed by [accessing a Web portal at www.sunnyportal.com](http://www.sunnyportal.com).

Editor's Note: Watts is immediately available for interviews, which can be coordinated by contacting Branden Blackmur at 216.472.2392 or bblackmur@fallscommunications.com.