



HIGH SCHOOL PURSUES LEED® GOLD ON JM PVC ROOF WITH DUPONT™ ELVALOY® KEE

R-36 insulation package is key element in energy efficient roof design



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Description: The design of the Green Local School District (GLSD) K12 building represents a growing trend in the construction of modern educational facilities. Many local school districts and various states are now considering the entire building envelope by requiring LEED Silver certification. Indeed, the roofing package for GLSD's new school in Smithville, OH, is an impressive one: 114,000 ft² of premium 60 mil PVC membrane and a system R-value of 36.

Challenges: Project Architect Melinda Scalfaro quickly determined the requirements of the school district and the Ohio School Facilities Commission, which helped fund the project. "In their minds, energy efficiency was the big payback through lowered heating costs and smaller, more efficient mechanical systems," says Scalfaro. "Our design goal was to heavily insulate the building envelope and keep airflow through building components to a minimum." Not satisfied with the state-mandated LEED Silver rating, Scalfaro's team is on target for LEED Gold certification.

Solution: Based for more than 25 years in nearby Massillon, Advanced Industrial Roofing Inc. was never more than a 20-minute drive from the jobsite. "But it was JM that did a great job ensuring we had all the special order Charcoal Gray PVC membrane, polyiso roof insulation and ¼" Invinsa® Roof Board when we needed it," says Advanced CEO Fred Horner. "That cover board is easy to handle and cut and improves aesthetics by laying down flat."

The building design included at least 12 roof areas of varying size and slope, which added a significant element of complexity to the project. "Fortunately, a JM technical representative was present during the job start-up and made periodic visits when we requested them," says Project Manager John May. "These JM reps are easy to work with and really know what the roofing contractor needs on a demanding new construction project like this one."

Naturally, Scalfaro was there to see the first of these details put into place. "Later on, I did my roofing punchlist along with the JM inspector," recalls Scalfaro. "It was really helpful to hear the manufacturer's concerns as the warrantor of the roof. It was also great that if I had a question about a detail or seam, JM was there with input."

After extensive energy modeling, the design team found the dark-colored membrane to be more energy efficient than a white roof for this application. The attractive color also blended well with the metalwork. "Because the school is unoccupied during the summer, the dark gray roof will save more energy in winter when school is in session," says Scalfaro.



Location:
Smithville, Ohio

Building Representative:
Green Local Board of Education
Judy Robinson, Superintendent

Architect:
Sol Harris/Day Architecture
Melinda Scalfaro, AIA, LEED AP BD+C

Construction Manager:
Hammond Construction
Ryan Weller

Roofing Contractor:
Advanced Industrial Roofing Inc.
Fred Horner, President /CEO
John May, Project Manager

Industry Affiliations:
National Roofing Contractors Association
Midwest Roofing Contractors Association
Ohio Roofing Contractors Association



Roofing System Solution: SP6RA
20-Year JM Peak Advantage® Guarantee

ENRGY 3® Roof Insulation System
Invinsa® Roof Board
JM PVC 60 mil Membrane, Mechanically Attached

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