



## Emil A. Cavallini Middle School

New roof stops chronic leaks, brings renewable energy to school

### Upper Saddle River, New Jersey

The 70,000 square foot EPDM roof on the Emil E. Cavallini Middle School, part of the Upper Saddle River (USR) School District, leaked for years. The roof was expensive to maintain and required frequent, costly repairs. Additionally, water entering through the roof had damaged the school's interior.

The USR Board of Education and school administration knew the roof had to be completely replaced, but in the current economy, it meant they had to find a creative financial solution to fund the project.

DiCara | Rubino Architects and Metro Energy Solutions worked with the district to spearhead the financial methodology that brought the project to fruition. By using financial incentives and rebate programs, it made sense to not only replace the roof, but to also design and install a solar (photovoltaic) panel system which would ultimately provide the needed revenue stream.

The design team worked with Tremco Roofing and Building Maintenance sales representatives Kyle Sweppenhiser and Ed Broderick to provide an integrated roof and solar panel system. The selected roof is a new Tremco POWERply modified bitumen system with thin film photovoltaic panels directly adhered to the roof membrane in a specialty adhesive. This product combination provides a sound roof and the solar panels needed to help to lower the school's energy costs through the utilization of clean, renewable energy. Advanced Roofing and Sheet Metal Company installed the POWERply MB roof.

The new 85 kWh photovoltaic system immediately reduces energy costs and it will create a consistent source of revenue by giving the district the opportunity to sell Solar Renewable Energy Certificates (SRECs). The students and staff at Emil A. Cavallini Middle School are covered with a new, secure, leak-free roof and are also setting an example of sustainable design in their community.

A 20 year, Integrated Solar Roof Warranty provides long term protection for the installation.

#### Tremco Sales Representatives:

Kyle Sweppenhiser  
Phone: (877) 615-2696  
Ed Broderick  
Phone: (609) 709-1571

#### Contractor:

Advanced Roofing and Sheet Metal, Inc  
Bellville, New Jersey



#### Building Integrated Photovoltaic Roofing

- Modules convert solar energy to electricity
- Lower energy costs, reduces carbon output
- Low-profile
- Easily removable if necessary
- May be eligible for grants, tax credits

#### POWERply MB Roofing System

- Combines the advantages of pre-engineered components with time-tested installation techniques for a fully integrated system that offers long-term problem management for your roof
- Can be either hot- or cold-applied depending on the application need
- Highly puncture resistant with exceptional tear strength and toughness
- Superior weatherproofing characteristics