

## MILWAUKEE AREA TECHNICAL COLLEGE

### SUSTAINABILITY WEBSITE

#### FUTURE PHOTOVOLTAIC

Milwaukee Area Technical College is planning to install Photovoltaic roof membrane as standard roofing material whenever possible in the future. Annual MATC reroof over 200,000 square feet of roof, depending on need and budget. Most of MATC roofs are flat roofs covered with roof felt and tar or a membrane roof. Recently a membrane roof containing photovoltaic cells has come to market. These are Green Roofs as they convert renewable energy into useful power similar to the glass photovoltaic systems at the Mequon and Oak Creek Campus. These roofs cost about \$ 10.00 per square foot more to install than traditional roofing; they will produce useful power over the normal life of the roof.

### **Energy-Efficient BIPV Roofing Made Easy**

Building designers and facility managers in all sectors face significant challenges today. They need to improve efficiencies, cut costs, and ensure sustainable profits. Solar Integrated's low-slope BIPV roofing products are designed to meet this challenge.

#### **Building Integrated Photovoltaic (BIPV)**

Whether you're looking for a high-quality "cool roof," an energy-efficient replacement roofing system, or a state-of-the-art building integrated photovoltaic (BIPV) solar electric roofing system, Solar Integrated is your sustainable building design partner.

Solar Integrated provides cost-effective commercial and industrial roofing solutions that combine lightweight rigid insulation, a gypsum fire barrier, a durable white single-ply roofing membrane, and thin-film photovoltaic membrane. We combine the highest quality commercial/industrial roofing with cost-effective, building integrated photovoltaic solar electric roofing.

### **Benefits of a BIPV Solar Roofing System**

Our unique flexible roofing product combines a roofing membrane listed under the EPA's ENERGY STAR® program with the most advanced, thin-film amorphous silicon photovoltaic cells. Our experienced team will evaluate your rooftop space and design a roof that maximizes solar coverage and electricity output. Some key features of a Solar Integrated BIPV roofing system include:

#### **Easy to install**

Our attractive, flexible solar roof panel literally rolls right on. We manufacture the solar roofing systems in easy to handle modular rolls to allow for rapid installation at our customer's sites. We employ experienced roofing professionals to install our products, with no disruption to your business.

#### **Light weight**

The solar panel weighs only 12 ounces per square foot, (3.66 kg per square meter) allowing installation on existing facilities without exceeding roof loading limitations. Typical installations range from 50 kW to 1 MW.

#### **Powerful**

The amorphous silicon panels enable maximum kilowatt-hour output, producing electricity using a wider spectrum of light than traditional crystalline technology. This feature enables the panels to produce electricity all day long, even when it is cloudy.

#### **Rugged and durable**

Durability to cope with challenging weather conditions, and stability to handle changing light and shade conditions, have been built into all our roofing products. In addition, our roof is sealed and bonded, providing a weather-tight, long-lasting roof that has no penetrations. All our roofs are backed by a 20 year guarantee and an operations & maintenance program.

#### **Attractive appearance**

Our unique electrical engineering integrates the solar array within the roofing assembly providing a neat and uncluttered roof surface.

#### **Green and economic**

Installing a Solar Integrated roof makes sound financial and energy sense for business, industry or government. When you decide to go green, you immediately:

- Convert your roofing liabilities into energy producing assets offsetting the rising cost of public utility supplied power and stabilizing your bills
- Participate in the LEED Green Building Rating system of the Green Building Council
- Position your company as a corporate environmental leader
- Access Solar Roof Incentives from Federal and State governments

#### **Backed by an Industry-Leading Guarantee and Excellent Customer Care**

Both the roof and BIPV system are backed by an industry leading warranty and an extensive maintenance package. The package offers a 20-year operations and maintenance service; routine inspections and optional 24/7 emergency response care; Internet-based system monitoring; and real-time data acquisition systems. Customers are able to monitor exactly the amount of solar power being generated with real-time metering for effective energy management and utility bill reconciliation