

The JM Solar Advantage

The JM E³co. PowerBlanket™ Advantage

- JM E³co., a wholly owned subsidiary of Johns Manville (JM), brings their 150-plus years of commercial roofing experience into the solar market.
- We factory laminate thin-film solar photovoltaic (PV) technology to JM high-performance TPO membrane to create the JM E³co. PowerBlanket, a roof-integrated PV product that is seamless to install and does not compromise the watertight integrity of the roof.
- This unique solution is unlike traditional rack-mounted solutions and offers a number of specific benefits noted below.

A Choice of Multiple Solar PV Technologies

The JM E³co. PowerBlanket is capable of utilizing multiple solar PV thin-film technologies, from a-Si (amorphous silicon) to CIGS (Copper-Indium-Gallium-Selenide). Each photovoltaic technology has its own unique performance attributes, whether it is power density, ambient light performance, durability or cost. We strive to be technology neutral because we recognize that each project must be analyzed to determine the best technology fit for use.



Nonpenetrating Solution to Maintain Roof Integrity

JM E³co. understands the value and purpose of a healthy roof. Leaks rarely occur in an open roof field, and are usually found near roof penetrations required for equipment, fans and vents. The JM E³co. PowerBlanket does not penetrate the roofing membrane and minimizes the possibility of roof leaks, as opposed to rack-mounted systems with hundreds of penetration points, all with the potential to leak if not constructed or maintained properly.

Lightweight Application Minimizes Loads on the Roof and Structure

A JM E³co. PowerBlanket is the lightest weight solar solution on the market, weighing less than 1 pound per square foot. Rack-mounted PV systems incorporating ballast or pavers can range from 5 to 10 pounds per square foot, or upwards of 15 per linear foot, increasing point loads on the roof and structure. Most existing roof systems were not designed with the intention of accommodating a heavy solar PV system.

Best Wind Performance Over Other Solar PV Options

The JM E³co. PowerBlanket reduces the possibility of creating additional wind uplift pressure with its flat application and sealed edges. Rack-mounted PV systems create air foils on the roof, adding additional wind loads that must be countered by attachment with roof penetrations or heavy ballast blocks. PowerBlankets can weather the stress of higher winds without the use of either penetrations or ballast.

Wide Range of Applications Using Proven Roofing Practices

The JM E³co. PowerBlanket can be applied to TPO, BUR, modified bitumen and EPDM roofs using proven roofing practices that are more than 50 years old. Standard applications include heat welding or adhesives, where other rack-mounted PV systems require power tools and complex assembly. JM E³co. PowerBlanket is designed to be installed only by approved roofing contractors, and requires minimal training and supervision.

Reduce Heat Load on Your Roof

Thin-film PV technologies are capable of normal operating temperatures in excess of 160°F. This product incorporates a factory-laminated 80-mil membrane that mitigates heat loading on the roof from the thin film panels and allows them to be removed without damaging the primary waterproofing membrane.

Flexible and Rugged

Unlike crystalline panels, the JM E³co. PowerBlanket is flexible and ships in rolls similar to roofing membrane. The product is also durable enough to handle light foot traffic.

