

## MANUFACTURING

# Replacement Readies Roof for Solar Installation

MW Canada, Ltd. | Cambridge, ON

### CHALLENGE

Every year for the last decade, Dwayne Schmidt, vice president of finance for MW Canada, Ltd., has worked with Garland Canada to replace the textile manufacturing facility's 170,000-square-foot roof one section at a time. With the entire roof replacement nearly complete, local representative, Andrew Michaud, suggested Schmidt consider installing a solar panel system on the roof. Aside from generating additional revenue from the large, unused roof space, a local government program offered a lucrative financial incentive and the payback period for the entire system was estimated at five years. Schmidt was intrigued by the idea, but wanted to first ensure the roof provided a durable foundation for the solar system and that a solar installation wouldn't damage the existing roof.

"We chose to install Garland's premium products on our roof and didn't want to risk damaging them with the installation of solar panels," Schmidt explains.

*"Garland Canada and Andrew have bent over backwards for me in terms of customer service. They tell me what I need, set up a plan, and give us a reliable roof system."*

**Dwayne Schmidt**  
Vice President of Finance  
MW Canada, Ltd.

### SOLUTION

With Schmidt's concerns in mind, Michaud surveyed the roof to determine if any of the remaining original roof sections showed signs of aging or deterioration. Based on his analysis, Michaud recommended a 30,000-square-foot section of the original four-ply built-up roof (BUR) be replaced with Garland's StressPly® E fiberglass-polyester reinforced, SBS and SIS modified bitumen membrane. The original roof system was near the end of its life cycle, and replacing it eliminated the costly and challenging task of temporarily disconnecting the solar system for a replacement in a few years. "If you're going to install a solar system on the roof, you want to make sure you have a very solid roof underneath. The last thing you want to do is disconnect the system because the roof underneath is failing and needs to be replaced," Michaud reports.

Once the roof replacement was completed, Michaud carefully coordinated the solar panel installation with Solera Sustainable Energies Company®, an Ontario-based solar panel installation company, to ensure the existing roof system was not compromised. As an additional measure of protection, Michaud recommended installing granular-coated walkway pads underneath the solar panel racking system to serve as a protective barrier between the equipment and roof membrane. The custom-made four-inch pads fit directly under the racking system, and act as a cushion to lessen the direct impact on the roof.

The 250,000-kilowatt system covers about 60 percent of the roof and is expected to generate \$4.5 million in revenue over the next 20 years. Schmidt credits the success of the project to Michaud's dedication and constant supervision of the job. Schmidt concludes, "Garland Canada and Andrew have bent over backwards for me in terms of customer service. They tell me what I need, set up a plan, and give us a reliable roof system. We have a very positive relationship."

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**Project:** MW Canada, Ltd.  
**Location:** Cambridge, ON, Canada  
**Garland Rep:** Andrew Michaud  
**Contractor:** Watertight Roofing Services Limited  
**Materials:** StressPly® E