



**Name:** Brookfield Landfill  
**Location:** Brookfield, MA  
**Install Completion:** April 2013  
**Project Size:** 435 kW  
**Panel Type:** 60 Cell - 235W  
**Racking Type:** Fixed Tilt - Ballasted Ground Mount  
**Terrain:** Landfill Cap  
**Installation Services:** Site Prep and Racking  
**General Contractor:** Martifer Solar

## Project Overview

Patriot Solar Group (PSG) has had a long standing relationship with Martifer Solar, completing over 5MW of projects to date. Patriot worked closely with Martifers engineering team to meet specific cap requirements and minimize soil disturbance as much as possible.

Patriot's in-house installation crew provided site preparation services prior to installing the racking system. Each ballast location required 4 inches of compacted, crushed stone; This acts as a barrier between the cap soils and concrete block to prevent thermal shifting due to freeze/thaw conditions.

Installers used specialized low pressure ground equipment to minimize soil disturbance and to make sure the psf weight did not exceed cap conditions. This equipment was especially critical during the Spring months with excessive rain and thawing top soil.

## Why Patriot Solar Group?

- Over 20 years of manufacturing and design expertise.
- Vast amounts of inventory ready to ship. High capacity/ high production manufacturing.
- Custom Engineering to meet any design criteria.
- Wet stamp drawings provided at no cost for project sizes 500kW and above.
- Patriot offers site prep and installation services for any size project.
- Renowned customer service and in-field technical support.
- Made in USA – BAA & ARRA Compliant. 10 year structural warranty.

## Project Objectives

- Customize rail lengths to maximize limited area of landfill cap using strings of 13 modules.
- Engineer racking system to accommodate slopes up to 5 degrees
- Design concrete ballast blocks to meet windload, snowload, height clearance and specific PSF requirements.
- Prep the cap and install racking system with minimal soil disturbance during wet Spring conditions.

## Project Results

- Racking system met all design criteria at a cost effective price for material and installation
- PSG installers completed racking installation in less than 2 weeks under less than ideal weather conditions.
- Patriot's construction managers worked closely with electrical contractors to make sure entire project timelines stayed on schedule and met all critical deadlines.

*“Patriot Solar Group has always delivered high quality and competitively priced products as well as flexible installation services during its collaboration with Martifer Solar USA. They have approached each project with a professional demeanor and with the creativity necessary to overcome the challenges that have arisen.”*

*-Daniel Dus  
COO, Martifer Solar USA*