



DP Heating and Cooling, an HVAC installer, and their distributor, Benoist Supply Company, a wholesale heating and air conditioning company, worked together to complete a whole-home efficiency, solar PV installation. Previously installing a heat pump system into the home, the homeowners opted to include a solar PV roof mount that covered almost 100 percent of the home's yearly electrical usage. By installing a heat pump system, the home's energy needs were lowered, requiring fewer solar modules for installation. In all, this allows the homeowners to enjoy the possibility of an up to \$0* monthly utility bill.

INSTALLATION DETAILS

This custom-designed system includes 26, 400-watt Q-Cell panels on the roof, using IronRidge's mounting system, and SolarEdge's efficient optimizers and single inverter. Due to the local restrictions, the contractor was only able to install 10kW worth of panels, still fulfilling almost all the home's energy needs. For this installation, the wires were routed through the attic and into the garage, where the inverter is located next to the load center for the home.



Mechanicsburg's Efficient Home

PROJECT DETAILS

Roof Size:	1,877 Sq. ft.
Solar Equipment:	26 panels – 400-watt Q-Cell panel SolarEdge Single inverter with optimizers Iron Ridge railing
Installers:	DP Heating and Cooling Website Benoist Brothers Supply Website
Utility Company:	Menard Electric Cooperative Website
Savings:	Average yearly savings on heating and cooling costs: \$1,841 Estimated Yearly Production: 15,119 kW

 CONSTRUCTION TYPE
Retrofit

 SOLAR PANELS
26 Roof Mount

 INVERTERS
String Inverters

 POWER PRODUCTION
10kW - Power Production

