



Customer focused. Built on values.

## Case Study

**Location:** Oak Creek, WI

**Industry:** Commercial & Office

**Scope:** Electrical, LEED, Solar

**Contract Amount:** \$125,000



Converters inside Grunau mail room

**Building SqFt:** 22,000

**Owner:** Grunau Company

**Engineer:** Miller Engineering

**Delivery Method:** Design Build

**Contract Type:** Time & Material

**LEED:** Gold EB Rating

**Website:** [www.grunau.com](http://www.grunau.com)

## Grunau Company Powered by The Sun

Grunau demonstrated its passion for sustainable energy by installing a solar photovoltaic (PV) system at its headquarters building. This was the first experience the Company's electricians had with photovoltaic installation, adding to Grunau's commitment to green building after previously achieving Gold LEED certification. Subsequent jobs allowed Grunau to develop great partnerships with vendors and designers to provide a turn-key system to anyone considering this type of project.

In total, 88 solar panels were installed on the building's roof. Four inverters, which transfer the sun's energy to useable electricity, were initially designed to be placed outside, but were rated at only -5 degrees F, which is far from suitable for Wisconsin winters. Therefore, Grunau workers incorporated the inverters inside by converting a corner of their mail room.

From a financial perspective, Return on Investment (ROI) is driven by multiple factors including sale of energy back to the grid of the energy produced, energy incentives, credits and accelerated tax benefits, all of which enhanced Grunau's outcome. With many days of sunshine, Grunau is ahead of schedule for its ROI which was originally determined to pay for itself in 9 years. A PV system also provides an emissions offset and counts towards LEED certification points.

Grunau's system can provide up to 20 kilowatts of power per day and has a 30 year lifespan. From an environmental standpoint over its lifespan, this solar PV system is expected to save 43,000 pounds of CO2 pollution, a substantial lessening of our carbon footprint.



Solar panels on roof