BD ELECTRICAL & SOLAR

GRID-TIED RESIDENTIAL SOLAR INSTALLATION

Location: Bridgewater, Massachusetts

Scope:

- Residential solar PV system design and installation
- Roof-mounted solar arrays
- Tesla string inverter system
- Solar racking and roof attachments
- DC and AC electrical installation
- Utility interconnection
- Net-metering coordination
- Permitting and inspections
- System commissioning

Project Highlights:

- Residential rooftop solar installation
- Grid-tied solar PV system
- Tesla string inverters
- Net-metered utility interconnection
- Multiple roof areas utilized for solar production
- Complete electrical and solar installation by BD Electrical & Solar
- Bridgewater, Massachusetts

Project Overview

BD Electrical & Solar designed and installed this residential grid-tied solar system for a homeowner in Bridgewater, Massachusetts.

The goal was straightforward: use available roof space to generate clean electricity, reduce the home's dependence on utility-supplied power, and take advantage of net metering.

The completed system integrates directly with the home's existing electrical service and utility grid, allowing solar production to serve the home's electrical loads while excess generation can be exported to the grid.

508-617-0800 info@bdesc.net bdelectrical.services

BD ELECTRICAL & SOLAR

Designed Around the Home

Every residential solar project starts with the property itself. For this Bridgewater home, BD designed the system around the available roof planes to maximize usable solar area while maintaining a clean finished appearance.
The installation included the complete solar electrical system, from rooftop attachments and wiring through the inverters and connection to the home's existing electrical infrastructure.

Professional Roof & Electrical Installation

A residential solar system is both a roofing installation and an electrical generation system. BD's team completed the rooftop racking, solar array installation, inverter installation, electrical integration, utility interconnection, and commissioning as one coordinated project. Attention to roof attachments, equipment layout, wire management, grounding, and electrical workmanship helps create a system designed for long-term operation while maintaining the appearance and integrity of the home.

Grid-Tied Solar & Net Metering

This system operates as a traditional grid-tied solar installation.
During daylight hours, electricity generated by the solar array can be used directly by the home. When solar production exceeds the home's immediate electrical demand, excess energy can be exported through the utility meter in accordance with the applicable net-metering tariff.
When the home requires more electricity than the solar system is producing, power is supplied by the utility grid as usual.
This allows the homeowner to benefit from solar without changing how electricity is used throughout the home.

Results

The Bridgewater homeowner now has a professionally installed grid-connected solar system producing electricity directly at the property.
The project demonstrates a traditional residential solar approach: a properly designed rooftop array, clean electrical integration, utility interconnection, and net metering working together to reduce long-term electricity purchases from the grid.

508-617-0800 info@bdesc.net bdelectrical.services