

Case Study

Cold Brook Farm – Net Zero in New Jersey

The Cold Brook Farm Project



- New homestead located in the Oldwick, New Jersey
- Key goals:
 - Embracing the stewardship of the land – leaving it better than how one found it
 - Minimizing the carbon footprint of the home
 - Increasing the biodiversity and health of the flora and fauna through regenerative permaculture and farming techniques
 - Sourcing materials locally in support of the surrounding community

Key Sustainability Considerations

- Use materials to build the home that are both sustainable and produced or harvested within 500-miles of the property
 - Included choosing locally-sourced timber, flooring from a mission-driven supplier, soapstone countertops from the last active soapstone quarry in the US
- Create an efficient, thermal building envelope using Tstud™
 - Engineered framing material that is used to dramatically reduce heat or cold conduction from the exterior walls to the interior walls of the home

Key Sustainability Considerations

- Balance window performance with architectural integrity and a commitment to sustainability and recyclability
 - Incorporated Coastal Douglas Fir windows that features a high resistance to moisture absorption, decay and insect infestation
 - Strongest and most durable of all softwoods
 - Harvested from sustainably-managed forests along the Pacific Northwest
 - Manufactured with sustainable practices in mind
 - True Triple Glazing technology for a thermal advantage and increased product strength

Key Sustainability Considerations

- Commitment to responsible land stewardship
 - Implemented organic/regenerative farming practices and improvements to improve the legacy of the land
 - Employed an expert to create a Forestry Management Plan to improve the woodland habitat
- Cellulose insulation that is efficient and recyclable
 - Provides a comparable R-value to many alternatives and does not out-gas, release odors or chemical dust

Key Sustainability Considerations

- Seamless flow of energy through solar panels and battery storage
 - Implemented a hybrid solar model with a configuration that maximizes onsite generated electricity supporting the zero net energy goal of the home
 - Power is drawn from the batteries and only if demand is higher than what is available will power be drawn from the grid

