

## Building

### Location

Manchester, New Hampshire 03101  
United States of America

**Building Roof Dimensions:** 60 m x 30 m

### Roof Assessment of the Building

The engineering team has inspected the roof and determined:

- There are no obstructions on the roof; therefore, the panels can be placed close together.
- The building is structurally sound and can hold more than 15 kg per square meter of weight.

### Expected Hours of Sunlight in Manchester, NH (by Month)

January	February	March	April	May	June
163	168	214	227	267	287
July	August	September	October	November	December
301	277	237	206	143	142

## Electricity Usage for the Building

**Average Electricity Usage (kWh) Annually:** 271,253 kWh

**National Average Cost of Electricity:** \$0.165 per kWh

**Note:** This is a projection of the building's energy use over the next 10 years based on the assumption that there will not be a drastic increase or decrease during that period.

## Solar Panels

**Size and Weight:** 80 in x 40 in x 2 in; 50 lbs

**Watts:** 400

**Amps:** 9.86A

**Volts:** 40.6 DC

**Cost:** \$560.00 per panel

### Purchasing a Solar Panel System for the Building:

**Installation:** \$0.75 per watt

**Incentives:** If you purchase the system upfront, you will receive a 30% discount on the total cost of the panels and the installation.

## Leasing / PPA a Solar Panel System for the Building

**Upfront Cost:** \$0.00

**Monthly Payment (Including Savings):** \$97.00 per panel

**Remaining Utility Bill:** \$20/month

**Duration:** 20 years

**Incentives:** Assume that SNHU does not qualify for leasing incentives.