

## The Lunch Box

The concept for The Lunch Box derived from the folds and 90 degree angles that occur in the shape of a box. The site for the restaurant is located near a college and would be a great opportunity to engage that age bracket. The purpose of this competition is to design a building that is an example for other buildings. In the design of the Lunch Box, aspects of a school atmosphere are present in aesthetics and the ability to teach the customer to be greener and energy conscious.

Used in the restaurant to help give power are 60 solar panels on the South side of the building and 9 panel of the roof. Evergreen Solar, BSA Series photovoltaic panels are found by Sunergy Systems located in Seattle, WA. The panels provide more electricity than competitors and have the lowest carbon footprint with a fraction of emissions. There is a 12 month energy payback that is faster than any panel on the market. The panels are angled at 15 degrees North of South to optimize rays from the sun.

Also used to power the restaurant are 3 Helix Wind turbines, model S322, located on the roof. The wind energy is used to power the lights and small appliances in the restaurant. The use of wind and solar combined self generates the power needed to run.

Appliances used are an ice machine, under-counter dishwasher, refrigerator/freezer, refrigerated sandwich units, electric induction cook top and soup kettle warmers. All appliances are energy star and faucets and toilets have water sense technology.

## Restaurant Operations

The menu for the restaurant is soups, salads and sandwiches. The food can be found locally at the available farms. Waste from the food is recycled and planned to be turned into compost and given away to the local farmers who exchange produce with us. Fresh vegetables will be needed every 3 to 5 days.

As far as staffing goes, there will need to be a back of the house staff used in food preparation and cooking. There will also need to be one worker at the front counter where ordering takes place. No waiters will be needed in the restaurant. When the customer is done with their food, they will sort it out in our recycling center located on the south wall. This teaches the community how we can eliminate waste and take care of our planet.