



ARCH 3691 Advanced Design and Building Information Modeling February
2013

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| Your Name: | Anil Dipu |
| Name of Project: | Parsons NS Stevens |
| Preference: | Green Architecture |
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| Use of Passive Solar Strategies | |
| The Parsons NS Stevens is an Empower house that is a site net-zero energy homes, efficiently producing as much electricity as it uses in a year. A 4.2 kW solar array produces all of the energy to heat and cool the home in terms of the lighting. The 4.2 kW solar arrays are integrated with the cool and heat of the home. As both components work as once they can eliminate electric bills to a net of zero. | |
| Use of Sustainable strategies | |
| The Parson NS Stevens uses a net-zero energy home strategy by efficiently producing as much electricity it uses in a year. All features such as the solar panels and mechanical components work synergistically. They all work together as one unit; thus this is a great way to conserved cost since it is compressed to one unit. | |
| Use of Technology | |
| The synergetic system uses a mechanical component that allows fresh preconditioned air to flow from the ventilator directly into the air handler. The water heater recovers heat from the exhaust of the condensing of the dryer. The Parson NS Stevens uses sensors effectively which is why it is considered a smart home because it uses sensors to indicate if there is occupants. To maximize efficiency it automatically turns off if there are no occupants. | |



Use of materials

The Parson NS. Steven uses a thick envelope that wraps the home and is made of wood I-joists that are sandwiched between sheathing.

Photovoltaic strategy

The Empower house is a net zero energy homes, efficiently producing as much electricity it uses in a year. It contains a 4.2 kW solar array that produces all the energy to heat and cool the home. These powers include lighting, run the hot water heater and electric appliances

What strategy would you copy? What is the greatest strength?

What I would copy in this home is the making the home habitable as possible. One of the strategies that they emphasize was making the home coming to life. They build vegetation plants where they can plant and grow crops for consumption. The team did their best to create a house which has sustainable materials to reduce maintenance cost and create a healthy environment.

What is the greatest weakness of the entry? What would you avoid?

According to the Plans of the Parson NS. Stevens House the entry goes in two directions. Personally two directions mean ease of access space from one end to the next. With this concept two egress means that we can escape the house during an emergency.

Additional comments?

What this house incorporated was the use of green materials in the roof to provide vegetation so that the garden can be consumed. With this concept the house itself can be habitable without the strain of being to go outside. With all the resources available the Parson NS Stevens house can attract many occupants since it provides people what they need to have healthy lives.