



When Judd Blunk and his wife Cyndy began planning their new home in Batavia, IL, they were looking for the ultimate in both performance and style. As an employee of a high-end German car company, Blunk wanted his home to match the performance and quality of the cars he sells.

He found the inspiration for such a home in Germany, where a new method of constructing Passive Homes is growing in popularity. These super energy efficient homes are built to capture heat from the sun and often do not require a heating system, even in cold climates.

It was no surprise that Blunk teamed up with German engineer Marko Spiegel, owner of Conservation Technology International, a design and energy consulting firm based in LaFox, IL. Spiegel had built a reputation of constructing One-Watt-Houses™ that can be heated with only one-watt of electricity per square foot of floor area on the coldest days of the year.

Spiegel's approach begins with a super insulated thermal envelope to seal in the home's internal temperature. He started with **Plastispan** expanded polystyrene under the concrete slab, and the **Advantage ICF System** for the basement walls. The **Insulspan Structural Insulating Panel (SIP)** system was used for the above grade walls and roof of the home. Not only do Insulspan SIPs provide the well insulated building envelope necessary for a high performance home, they also speed up installation time and reduce labor costs.

"It's quick and it's spectacular," said Blunk. "You get a crane on site and the house of your dreams comes together very quickly."

The Insulspan building envelope and other energy saving technologies allowed Spiegel to eliminate the furnace from the home and rely on passive solar heating through one of the coldest Illinois winters on record. A special attachment to the home's ventilation system can produce heat using the home's hot water heater if necessary.

Blunk's 2680 sq. ft. home is 60% more energy efficient than an average new home. He is average heating and cooling costs are less than \$50.00 a month. He credits Insulspan SIPs as one of the key energy saving measures in his home.

"I visited the Insulspan factory, met with their designers and architects, and without fail my experience with Insulspan was positive," Blunk said.

**Plasti-span HD 8" total- two layers of 4"**