



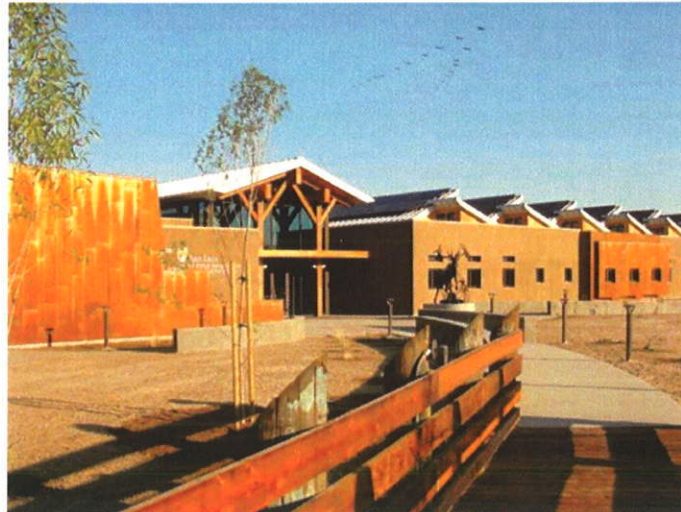
Federal legislation would offer financing to rural homeowners for energy-efficient retrofits

2012 Building Excellence Awards recognize energy-efficient, sustainable SIP projects

by on APRIL 13, 2012 · [LEAVE A COMMENT](#)

April 12, 2012 – The Structural Insulated Panel Association (SIPA) recognized nine homes and commercial buildings that demonstrate the high levels of energy efficiency and environmental sustainability achievable with SIP construction during the 2012 Building Excellence Awards ceremony, held at the SIPA Annual Meeting & Roundup in San Antonio, Texas. Now in its tenth year, the SIPA Building Excellence Awards highlight innovative projects using SIPs as the basis for energy-efficient, green buildings.

All submissions used SIPs for at least 50 percent of the building envelope. Entries were evaluated on energy efficiency, design and structural engineering innovation, environmental sustainability, and creative use of SIP construction.



San Luis National Wildlife Refuge Complex by Premier SIPs

[Premier SIPs](#) took top honors for their work on the San Luis National Wildlife Refuge Complex, located outside of Los Banos, California. The judges selected the LEED Platinum visitor's center as the Overall Competition Winner and winner of the Commercial/Industrial/Institutional category. Designed by Catalyst Architecture, the 17,000 sq. ft. building uses less than zero energy, generating more power than it consumes with a 55 kW PV system. To meet the rigorous LEED Platinum standard, designers specified SIPs for the walls and roof, along with a passive solar design that emphasizes daylighting and locally-sourced building materials.



Deep energy-efficient retrofit using retrofit insulated panels by Panelworks Plus

SIP dealer/distributor [Panelworks Plus](#) was named the Overall Competition Runner Up for their deep energy-efficient retrofit of a single family home in Minneapolis, Minnesota. Crews installed 4-inch retrofit insulated panels to the exterior walls, adding continuous insulation and reducing air leakage. New high performance windows and doors were installed, as well as additional attic insulation and spray foam insulation around the rim joist. An energy audit revealed that the remodel reduced air leakage from 8.26 ACH₅₀ to 3.97 ACH₅₀, and cut the homeowner's total utility costs in half.



Hudson Passive Project by Timberline Panel Company

In the Single Family Homes Under 3,000 sq. ft. category, the judges selected the Hudson Passive Project by [Timberline Panel Company](#) as the category winner. Architect Dennis Wedlick designed the home to meet the stringent Passive House standard using 12-inch SIP walls and a 12-inch SIP roof with a Neopor EPS core. Airtight SIP construction helped achieve a stunningly low blower door test results of 0.15 ACH₅₀ and a HERS Index of 52.



Lemke Residence by Energy Panel Structures

SIP manufacturer [Energy Panel Structures](#) claimed the Single Family Homes Over 3,000 sq. ft. category with the Lemke Residence in Hampton, Iowa. By focusing on a carefully sealed building envelope that included SIPs, spray foam insulation, and foam sheathing on the basement walls, builder Craighton Construction succeeded in limiting air leakage to 0.75 ACH₅₀. The addition of a geothermal heating and cooling system helped the home reach a HERS Index of 32.



Coventry Senior Living complex by Energy Panel Structures

[Energy Panel Structures](#) also won the Multifamily category with the Coventry Senior Living facility in Mahtomedi, Minnesota. Built with 6-inch SIP walls and a 10-inch SIP roof, the three story complex is ENERGY STAR Qualified with a HERS Index of 52. Heating in the cold Minnesota climate is provided by a combination of in-floor radiant heating and an air-source heat pump.



Freehill farm shop by Energy Panel Structures

In the Agricultural category, [Energy Panel Structures](#) was selected as the category winner with the Freehill farm shop in Melvin, Illinois. The 12,800 sq. ft. building uses 8-inch-thick, 22-foot-tall SIP walls placed vertically and finished with zinc-coated galvanized steel. In addition to SIPs, builder Consolidated Builder Center installed high performance windows and insulated doors help the building owners save on energy costs while maintaining farm equipment during the winter.

Honorable mentions were awarded to the following entries:

- Single Family Homes Under 3,000 sq. ft.: Barrel Vault, [Wickiup Builders](#)
- Single Family Homes Over 3,000 sq. ft.: Newman Residence, [The Chuba Company](#)
- Commercial/Industrial/Institutional: Finn Hill Junior High School, [Premier SIPs](#)

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