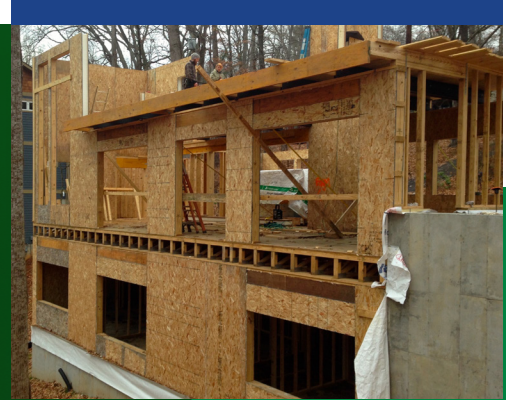




**PREMIER SIPS**  
STRUCTURAL INSULATED PANELS

## BUILDING GREEN



### PRODUCT OVERVIEW

When choosing Premier SIPs you are getting a material with built-in features that provide environmental benefits.

Building materials and their impact on the environment should be considered over the full life of the building structure. This is considered the “life cycle” of the building. This includes inventorying the cost to the

environment from material production, transportation, installation, use, and end of life reuse, recycling, or disposal. Research has shown that for both residential buildings and commercial buildings that operations contribute to over 90% of the building’s impact on global warming. Reducing energy use is the best way to reduce our impact on the environment.

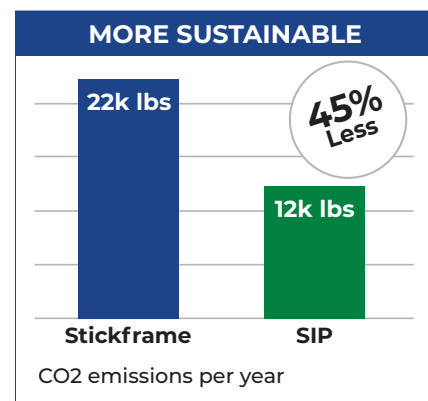
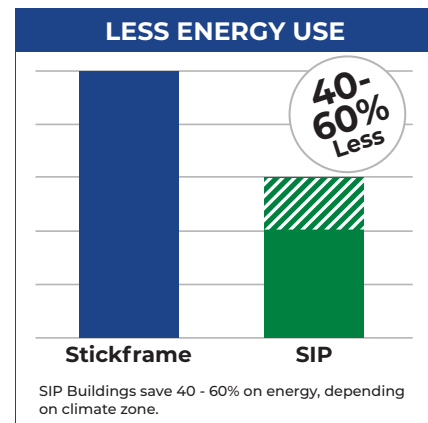
### PREMIER SIPS MATERIAL

Premier SIPs reduce their impact on the environment by using components that are inherently earth friendly:

- The wood facings are from rapidly renewable wood species
- Premier SIPs solid core insulation is recyclable and does not contain CFCs, HFCs, HCFC’s
- Premier SIPs construction minimizes the use of traditional lumber, and decreases construction waste by providing factory fabrication of complete building packages reducing a typical residential home’s construction waste by 30%

### SAVE ENERGY CONSUMED & CO2 EMITTED WITH SIPS CONSTRUCTION

Premier SIPs are fifteen times more airtight than traditional stick-frame construction, the solid core insulation also delivers exceptional thermal values that are far higher than traditional site-framed structures. These two key characteristics of a SIPs structure make a massive impact and enable SIPs buildings to save both energy consumed and emitted.



## GREEN BUILDING PROGRAMS

Selecting Premier SIPS for construction makes it easy to comply with various green building standards and certifications.

### USGBC – LEED

Premier SIPS have been used in many LEED buildings, including buildings with the highest Platinum rating.

### ENERGY STAR®

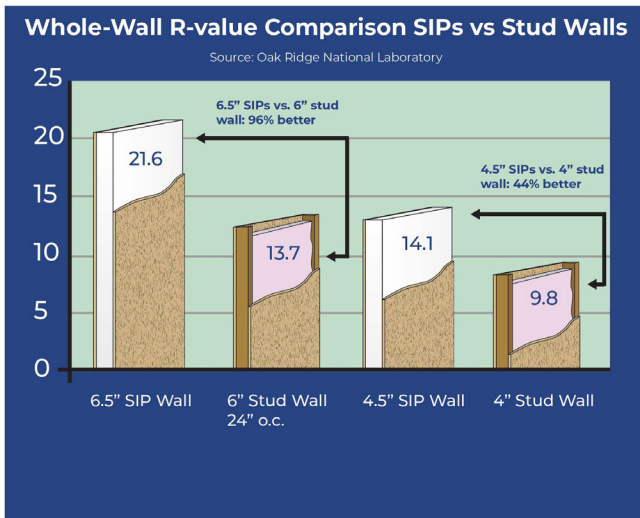
The U.S. Department of Energy's ENERGY STAR program provides a rating structure for certification. Premier SIPS are so airtight that ENERGY STAR has waived the requirement for blower door tests for SIPS homes to certify.

### NAHB Green Building

The National Association of Home Builders (NAHB) Green Building Standard helps advanced green building and SIPS are recognized and given points for increased effective R-values for the building envelope.

## WHOLE WALL R-VALUE

There's more to most walls than meets the eye and the R-value of a whole wall can be considerably lower than the R-value of the insulation.



## NATIONAL TESTS VERIFY PREMIER SIPS OUTPERFORM CONVENTIONAL FRAMING

A Premier SIPS test room significantly outperformed a 2x6 stick-framed and fiberglass-insulated room in testing under identical laboratory conditions at Oak Ridge National Laboratories (ORNL). Results from a carefully monitored and instrumented study in ORNL's climate simulation laboratory showed that Premier SIPS construction is more energy efficient and far more airtight than stick-frame construction.

### Whole Wall R-value Test Method

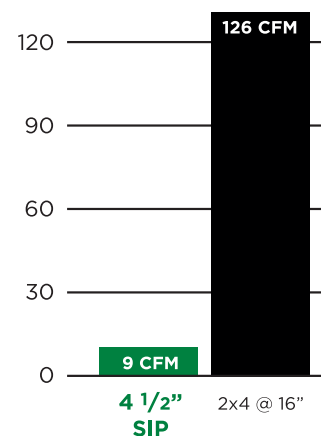
The ORNL test setup created identical climate conditions and measured the airtightness and the heating energy requirement of the two rooms. ORNL testing demonstrated that Premier SIPS connections created a structure which was virtually air tight. This contrasted to stick built walls which had considerable air leakage. Dramatically reducing air infiltration provides a more comfortable interior environment, an advantage in building with Premier SIPS.

### Energy Use

The ORNL room with 4 1/2" SIP walls used 9% less heating energy than the 2x6 stick-built room under identical conditions (an indoor temperature of 70°F and an outdoor temperature of 0°F). Based upon this testing, a 6 1/2" SIP (50% more R-value than a 4 1/2" SIP) will dramatically outperform 2x6 stick construction. Building with Premier SIPS will more effectively meet energy code requirements than building with 2x6 stick walls.

### ORNL TESTING

Lower cfm = higher comfort + lower energy cost



Website: [premierlips.com](http://premierlips.com) Toll Free: 800-275-7086

