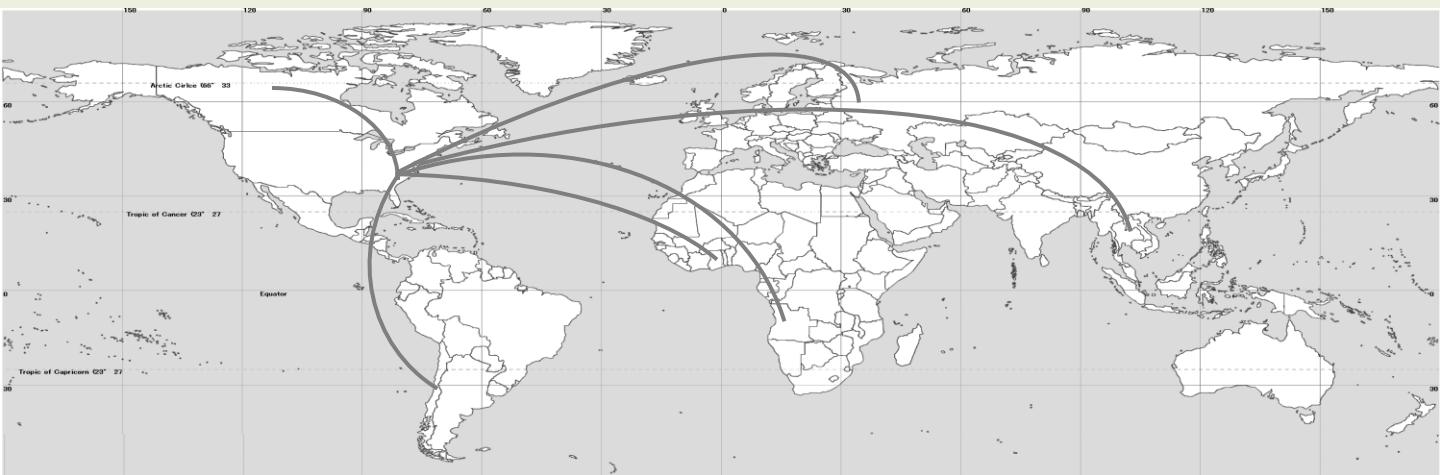


The Power of Technology...

...To Revolutionize World Housing



Eco-Structures | Global Manufacturing
Solutions
SIP-Panels

Eco-SIP-Panels – The Most Advanced Building Panel on the Market Today

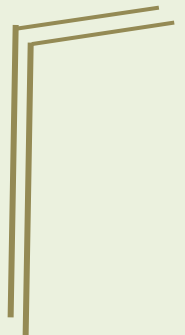
Eco-SIPS, using only superior polyurethane foam insulation, combines a variety of technologies adapted from the construction, refrigeration, biomedical research, building science and renewable energy industries to offer what senior US Department of Energy scientists at Oak Ridge National Laboratories (U.S.A.) have referred to as “***the most advanced structural insulated panel system on the market today.***”

The present global construction products market offers a myriad of solutions for affordable and government funded housing projects all over the world. Today “very large panel” solutions require fair weather, wide-open roads, large trucks and large on-site hoisting equipment for assembly. Other panels are often made of water retaining and flammable (or melting) expanded polystyrene foam (EPS, or Styrofoam®). Traditional industry solutions are most often non-integrated and inelegant attempts to provide for rapidly and safely deployed affordable construction with little regard for energy efficiency.

Utilizing only 4ft wide (1.22m) panels of variable heights that are easily transported and safely handled on the jobsite without the use of large cranes or hoists, the Eco-SIPS patented and patent pending building solutions enables low-skilled or non-skilled workers to ***rapidly*** assemble strong, safe and very well insulated structures in a short amount of time with a limited number of tools and potentially no power tools. Homes made from Eco-SIPS are environmentally safe and will absolutely provide a more comfortable and energy efficient living environment.

INFINITELY ADAPTABLE....LOCALLY FOCUSED

Suitable for everything from small homes to large structures, Eco-SIPS can use more than 15 different siding materials (skins) adapting to a variety of environmental conditions, interior preferences and material availability. Eco-SIPS can integrate locally available siding materials for panel skins and adjust the panel standard sizes to different dimensions. Locally available materials such as ***grass or bamboo mats*** may be integrated to construct entirely new siding materials, and as important Eco-SIPS can customize foam formulations suitable for leveraging locally available resin resources while increasing profit margins!



ONLY ECO-SIPS CAN OFFER THESE UNIQUE FEATURES COMBINED INTO THE MOST ADVANCED BUILDING SYSTEM

Polyurethane (PUR) foam – When compared with EPS (like Styrofoam®) insulation, PUR foam is stronger and enables almost twice the insulation in the same thickness. Our proprietary foam blend can also offer foam cores more than 18cm (7"+) thick with insulation R-values greater than R-60 when other PUR foam blends will not form that thick.

- Class 1 Rated Flame Retardant Foam Core Available

Single Piece Corner Panels – Instead of bringing two or more large walls together on the jobsite and wrestling with ensuring they are plumb and square, Eco-SIPS delivers single piece corner panels to the jobsite in one piece. Aside from easier assembly this multi-segment corner panel offers a significantly stronger solution for sheer forces – those lateral forces encountered in **high wind** (typhoon, hurricane), tsunami and **seismic** (earthquake) conditions.

Joining panels together – Panels simply lock (or unlock) together using embedded cam-locks anchored in cured polyurethane foam. The low structural strength of EPS foam can never offer embedded cam-locks, and Eco-Panels create a wall many times stronger than traditional stick-built construction. **No glue, nails or screws are required to simply and permanently join panels together!**

Panel alignment – A combination of embedded rails, locks and profiled edges force panel alignment in **THREE dimensions** ensuring fast air tight assembly and stronger wall systems. Other panel systems only force alignment in two dimensions, adding jobsite complexity and errors.

Openings - Windows and doors are pre-framed in the panels and electrical junction boxes and conduit can be molded in the panel per architectural specifications prior to shipment to the jobsite.

Multiple Skin or Siding Options Possible

Pest Resistant – non-nutritive sidings and foam core

