



Secure-Lock Structural Insulated Panel System And Accessory Dwelling Unit (ADU) Overview

Presented by:

Eco-\$mart, Inc.

An EPA ENERGY STAR Partner



Eco-\$mart, Inc. is a Service Disabled Veteran Owned Business



About Eco-\$mart, Inc.

- In Business Since 1993
- One-Stop Green Construction Supply
- An EPA ENERGY STAR Partner
- Operated with Guidance from the Nonprofit Florida House Institute for Sustainable Development (FHI):
- Free Eco-\$mart Materials Consultation
- Distributes / Installs Approved Systems
- Educational Seminars for Public and Trades



The Florida House Learning Center

Created by the Nonprofit Florida House Institute for Sustainable Development and Sarasota County Cooperative Extension



The Florida House was opened to the public on Earth Day, 1994 – The first green demonstration home in the U.S. – Inspired creation of Eco-\$mart

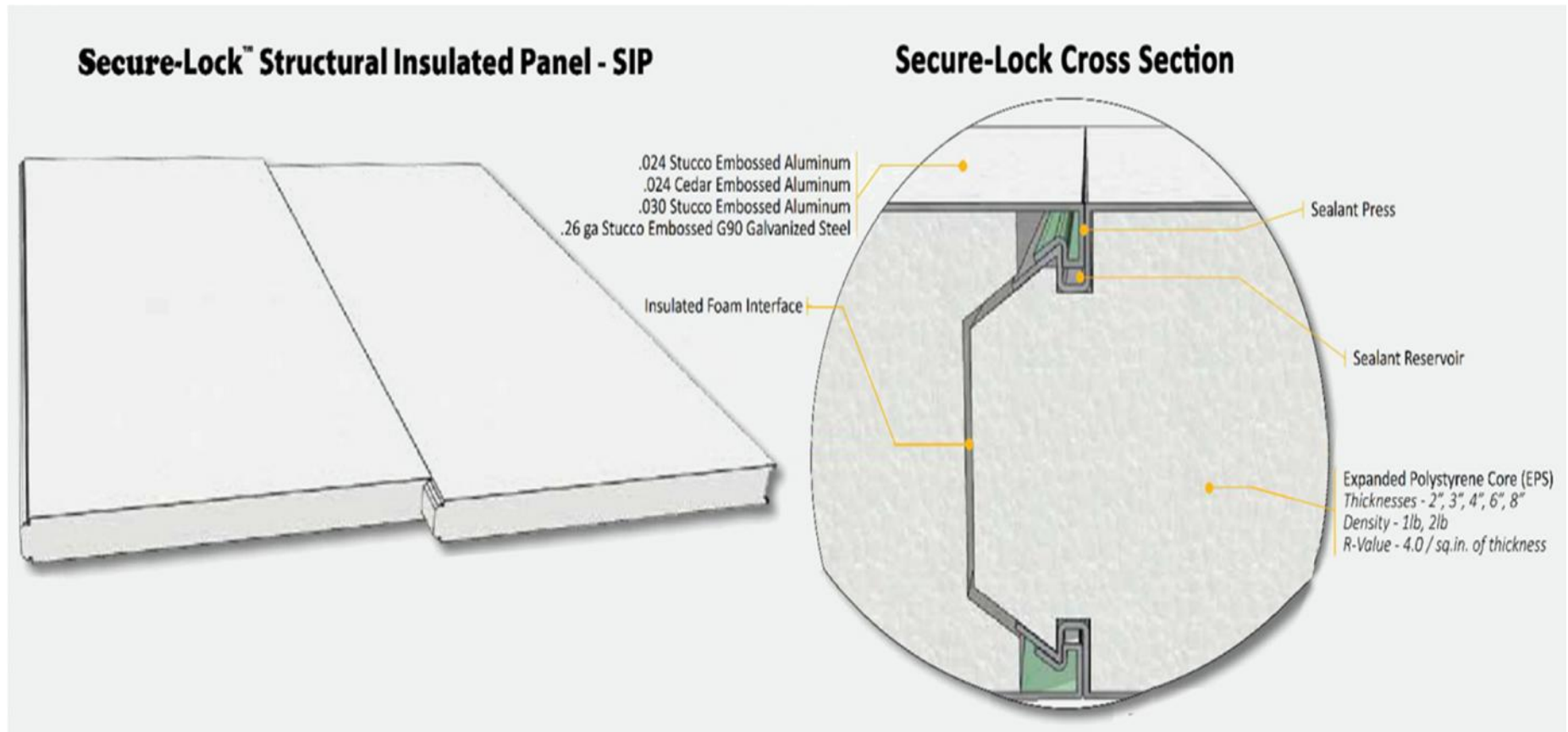


Our Priorities for Selecting Green Building Materials

1. Enhances efficiency, health, disaster resistance.
2. Reduces maintenance, construction time, construction costs, operating costs.
- 3. If not capital cost saving, then at least creates positive cash flow for building owners.**
4. Locally available, supportable.



What is the Secure-Lock Structural Insulated Panel?



Answer: A Fire, Seismic, Hurricane, Mold and Pest-Resistant, Energy Efficient Steel-Skinned Structural System, Approved for Walls and Roofs



What Are the Benefits of the Secure-Lock Structural Insulated Panels?

1. **Faster construction** (50% faster shell dry-in), fewer trades and inspections, cost competitive.
2. **Hurricane / Cyclone Wind and Seismic Resistant** construction.
3. **Class A fire rating** - Metal skinned SIP panels provide a wood-free structure.
4. **Energy savings** between SIPS and conventionally built structures produce **30% to 50%** monthly utility savings as well as a 30% to 50% smaller HVAC system requirement.
5. Termites / ants / **pests** / mold have **no food** source as wood provides.
6. **Conventional exterior finishes** such as brick, stucco and siding can be used, and interior finishing is the same as conventional structural systems.
7. A **Fresh Air / Energy Recovery Ventilator** is included.
8. Standard plans are available, or we can **produce to your plans**.
9. **Construction up to 3 stories** can be done with **no additional structural support**.
10. We always recommend **FGBC certification** – which is easy with Secure-Lock.



Approvals for Secure-Lock Structural Insulated Panel



- **Florida Product Approved**
- **Miami-Dade County Approved**
- **California FBH Approved**
- **Texas Department of Insurance Approved**
- **ENERGY STAR Certified**



What Types of Structures Can You Build with Secure-Lock Structural Insulated Panels?

Single Family Homes / Multi-Family Structures / Commercial Buildings





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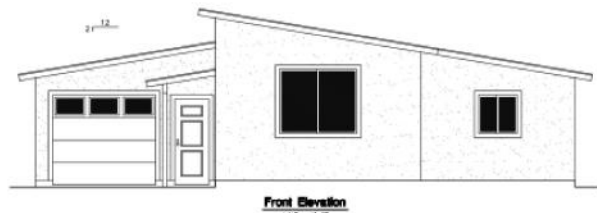
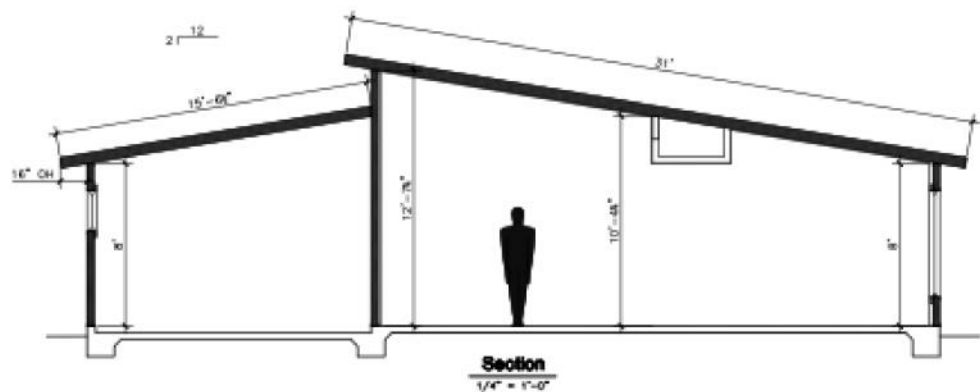
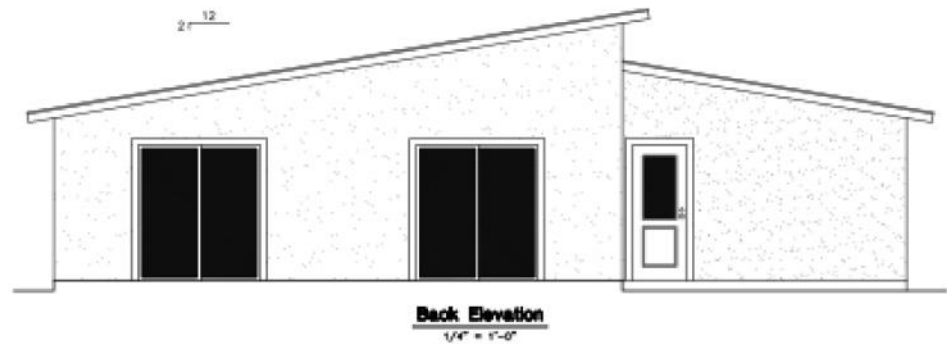
Panel application - Torreon Mountain House / Show Low, Arizona



An Example Home Design for Secure-Lock SIPs– North Port, Florida



Living Area	1259 sq. ft.
Garage	336 sq. ft.
Covered Entry	29 sq. ft.
Total Area	1624 sq. ft.



1259sf under air / 1624sf under roof - \$75,000 installed shell and metal interior framing



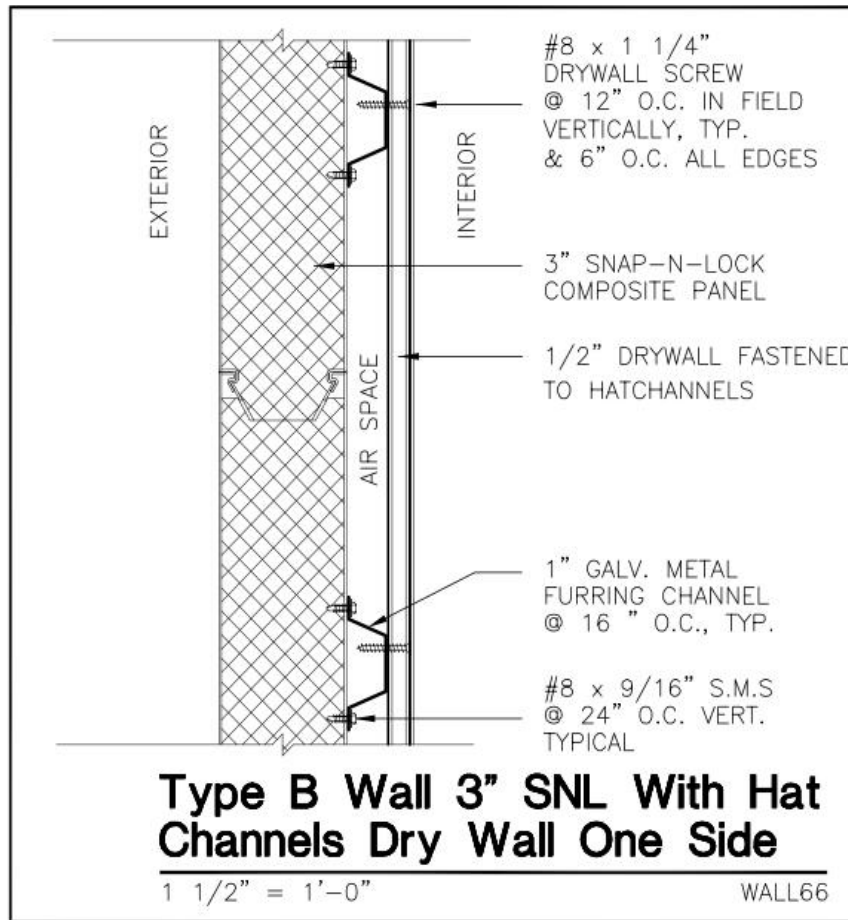
How Does the Contractor Build with Secure-Lock Structural Insulated Panels?



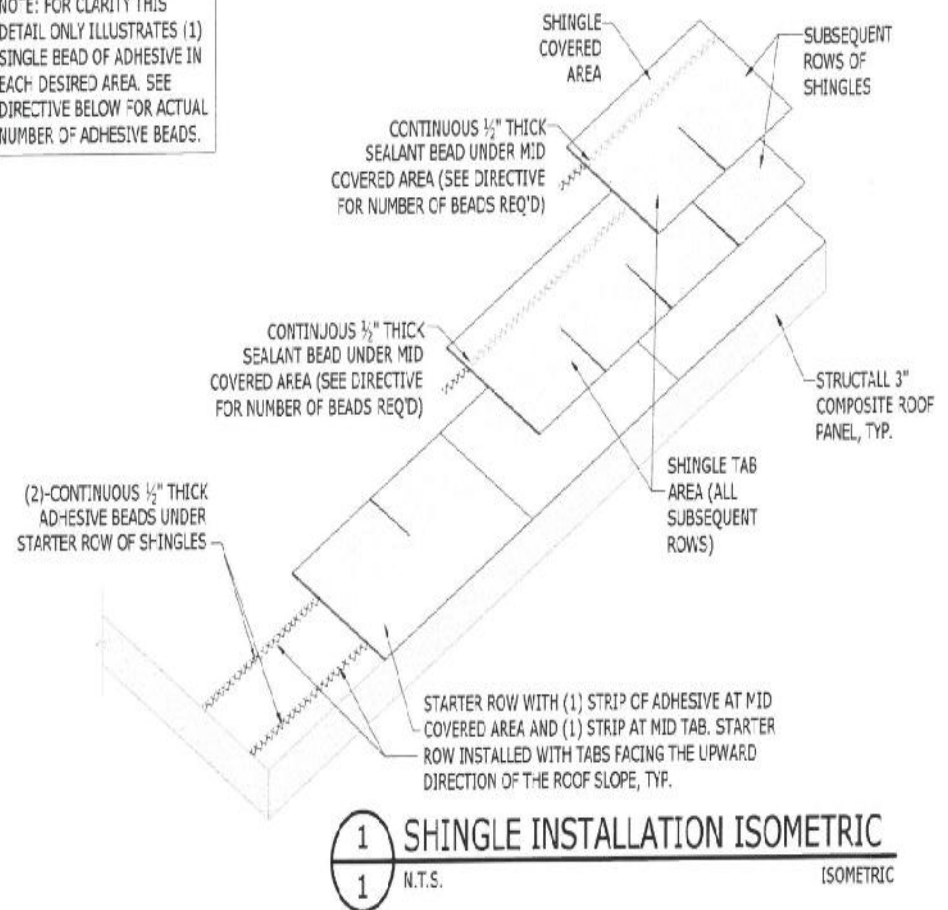
Secure-Lock Panels can be 2-Stories Tall. Gable Roof Designs Save Costs



How Does the Contractor Build with Secure-Lock Structural Insulated Panels?



NOTE: FOR CLARITY THIS DETAIL ONLY ILLUSTRATES (1) SINGLE BEAD OF ADHESIVE IN EACH DESIRED AREA. SEE DIRECTIVE BELOW FOR ACTUAL NUMBER OF ADHESIVE BEADS.



Electrical Wiring, Plumbing and Exterior Finishes are Completed Conventionally



How Does the Contractor Build with Secure-Lock Structural Insulated Panels?

Faster, with Fewer Trades and Inspections – Finished the Same Way on the Interior and Exterior as Conventional Construction

Time-Lapse Video of PowerSmart Garage Construction:

<https://www.youtube.com/watch?v=ra7Rq6iZEeQ>





What Types of Structures Can You Build with Secure-Lock Structural Insulated Panels?



Accessory Dwelling Units (ADU) – 576sf Alternative Elevations

576 SF ADU Floor Plan





576 SF “Seaside” Floor Plan



Seaside 576 ADU

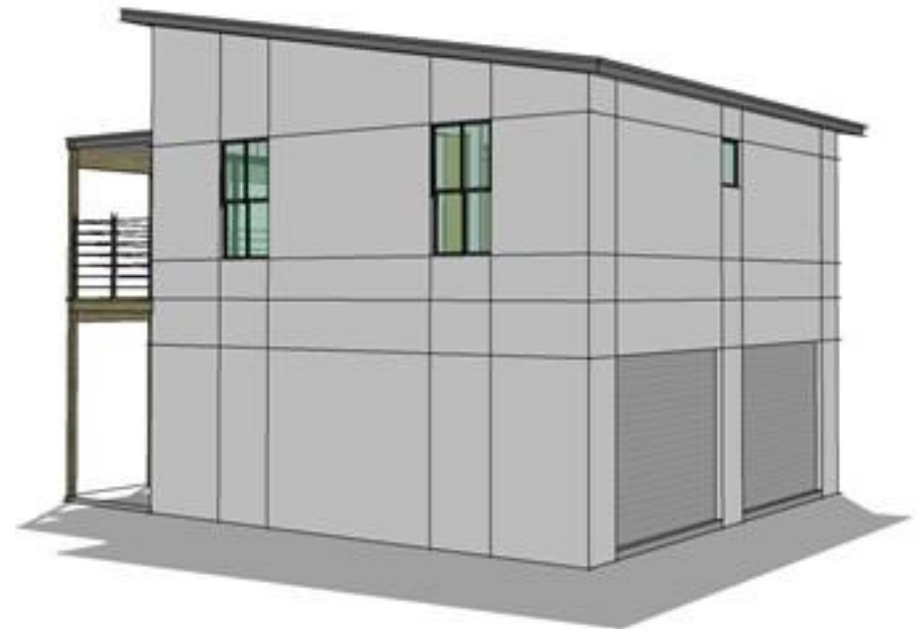


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BARRIER 360
STRUCTURES LLC



576 SF Carriage House Option (over Garage)





512 SF ADU Elevation and Floor Plan





384 SF ADU Elevation and Floor Plan



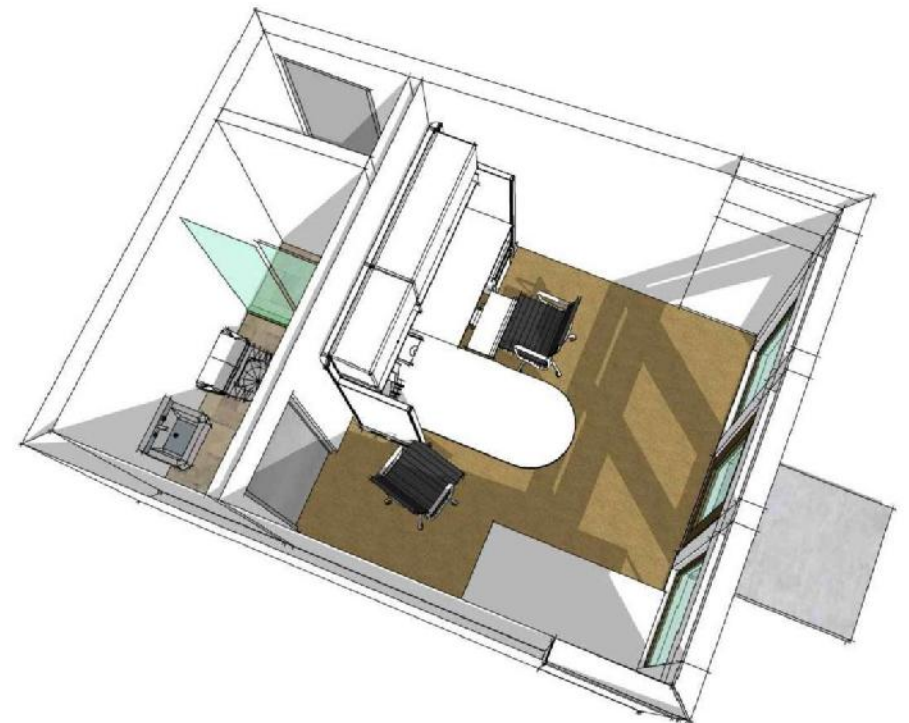


384 SF Carriage House ADU Elevation and Floor Plan





192 SF Office ADU Elevation and Floor Plan

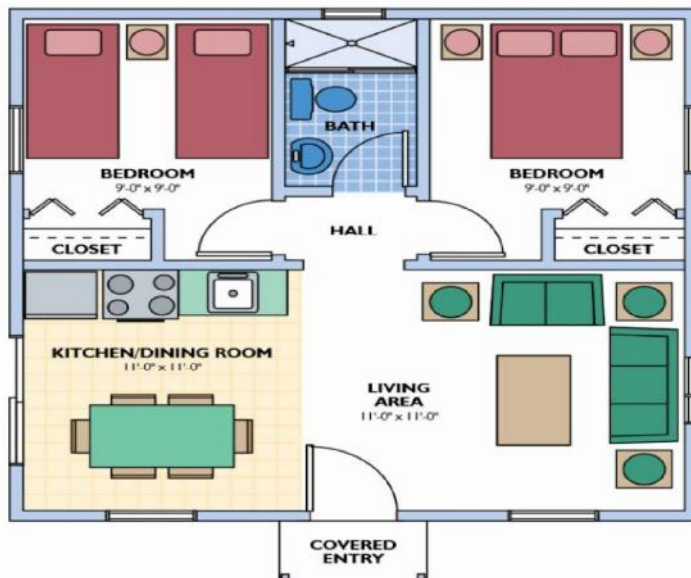




How Much Do ADUs Cost?

Sale Prices:		Insulated Impact		Shell Labor	Shell Materials	Installed Shell and	Slab and	Shipping (FL)	Real Estate			
Model	Square Feet	Secure-Lock	Windows	Incl. Windows	\$/sf	Windows \$/sf	Completion	and BS360 Fee	Subtotal	Commission	Total	Total \$/sf
384 16x24	384	\$23,360.45	\$8,296.25	\$5,760.00	\$60.83	\$97.44	\$61,440.00	\$4,050.00	\$102,906.70	\$3,087.20	\$105,993.90	\$276.03
512 Seaside	512	\$28,723.09	\$7,681.74	\$7,680.00	\$56.10	\$86.10	\$81,920.00	\$4,050.00	\$130,054.83	\$3,901.64	\$133,956.47	\$261.63
576	576	\$30,856.71	\$10,087.94	\$8,640.00	\$53.57	\$86.08	\$92,160.00	\$4,050.00	\$145,794.65	\$4,373.84	\$150,168.49	\$260.71
384 Carriage	768	\$33,183.70	\$8,296.25	\$11,520.00	\$43.21	\$69.01	\$122,880.00	\$4,050.00	\$179,929.95	\$5,397.90	\$185,327.85	\$241.31

Recent pricing for construction in Florida (2023)



2 Bedroom, 1 Bath
OVERALL DIMENSIONS
24'-0" x 24'-0"
TOTAL LIVING AREA
576 sq.ft.

This modest home is perfect as a vacation home or mother-in-law apartment. Available in one or two bedroom floor plans.

BARRIER 360
STRUCTURES|LLC

12-hour 576 sf house build from materials delivery to full shell “dry in” ready for owner finishes and appointments.



12 Hour Home Construction



Hour 1 - House kit is delivered and unloaded at the project site



12 Hour Home Construction



Hour 2 - Pre-cut panels, extrusions and misc. hardware are sorted.



12 Hour Home Construction



Hour 3 - Metal receiving track is attached to concrete foundation slab.



12 Hour Home Construction



Hour 3.5 - First wall panels are erected (note placement by two workers).



12 Hour Home Construction



Hour 5 - 50% of Exterior wall panel are installed.



12 Hour Home Construction



Hour 6 - Final exterior wall panel is installed along with interior bearing wall.



12 Hour Home Construction



Hour 6 - View of completed exterior wall panels ready for roof panel installation.



12 Hour Home Construction



Hour 7 - Interior roof bearing wall is installed.



12 Hour Home Construction



Hour 8 - Initial roof panels are installed (no special equipment required).



12 Hour Home Construction



Hour 9 - Front roof panel installation is complete.



12 Hour Home Construction



Hour 10 - Roof is complete while windows are placed and secured in pre-cut openings.



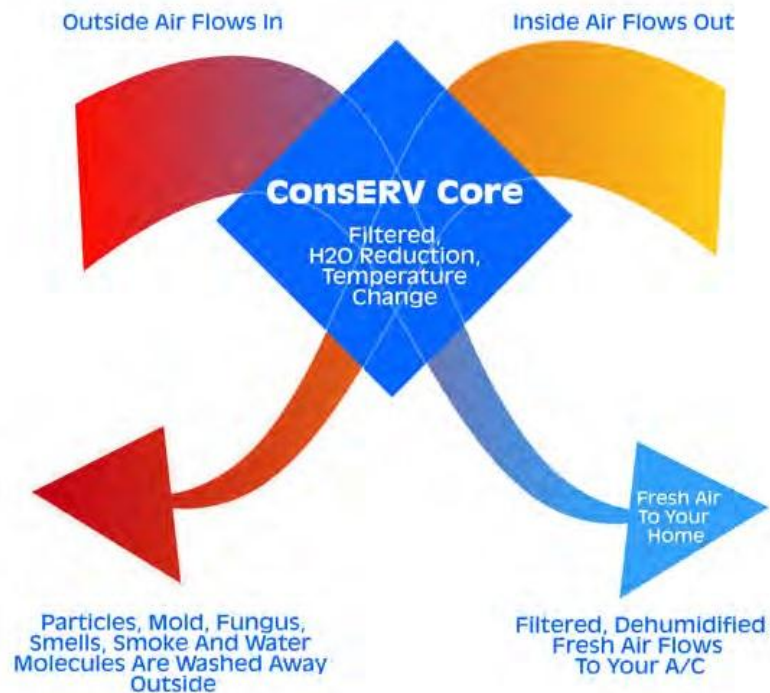
12 Hour Home Construction



Hour 12 - Trim completed as house is ready for owner finishes and appointments.



Included with Secure-Lock Homes: ERV(Energy Recovery Ventilator)



- Brings in Fresh Air, but Dried and Cooled by Crossing Air Stream with Cooler, Drier Exhausted Indoor Air
- Keeps Building under Positive Pressure
- No Condensation - Moisture Exchange Occurs at Vapor State
- Custom Sizes Available for Any Application
- A Key Element of a Healthy Home



Take Your ADU Off the Grid

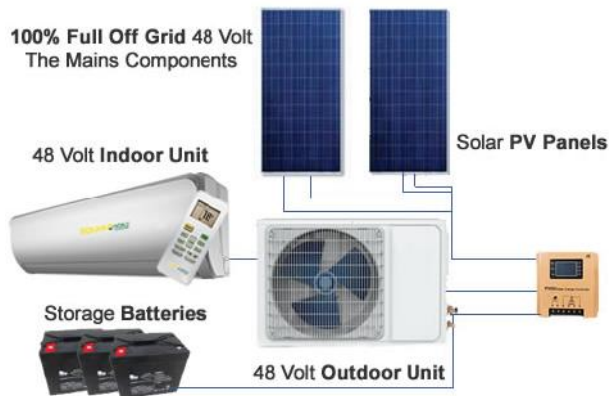
Passive Solar Water Heater



Solar Electric System / Batteries



Dual Axis Tracker



Solar A/C Unit



A Summary of the Benefits of Secure-Lock Structural Insulated Panel Construction

- **Disaster Resistant (Fire, Seismic, Wind, Mold, Pests)**
- **Higher Efficiency / Lower Utility Bills**
- **Faster Construction**
- **Higher Resale Value**
- **Lower Maintenance and Insurance Costs**
- **Healthier, Quieter Indoor Environment**
- **Positive Media Attention for Builder / Owner**
- **Reduced Environmental Impact / Easy FGBC Green**



What to Do Now?

- **Contact Eco-\$mart for a free consultation at 941-376-8484 / info@eco-smart.com**
- **Have Eco-\$mart quote from building plans, or work with us and your Architect to design your project.**
- **Keep in mind that it saves home and building owners money to build with Eco-\$mart systems - first month, every month.**

Thank you for your time and interest