ECO-FRIENDLY INNOVATION

GEOTEC’s Eco-Hybrid Building System

A New Architectural Standard

GEOTEC proudly introduces the **Eco-Hybrid Building System**, a groundbreaking solution that redefines the future of sustainable construction.

Blending **nature, technology, and design**, our system is engineered to preserve the environment while delivering cutting-edge performance.

GOOD DESIGN award:

g e o t e c

emotion

“ECO-FRIENDLY BUILDING

“Smart. Sustainable. Future-Ready.”

LOCAL ENGAGEMENT

We prioritize the use of locally sourced materials and local workers, supporting regional economies and minimizing transportation emissions.

ONE-WEEK COMPLETION

Our advanced system allows for rapid construction, with projects completed in as little as seven days.

ECO-SAFE MATERIALS

All components are eco-friendly, non-combustible, and made from renewable resources for a healthier planet.

ZERO ON-SITE WAST

Thanks to standardized material systems, construction generates no site waste, ensuring clean and sustainable building processes.

LIGHTWEIGHT STRUCTURE

Our system’s light structural load enables construction without traditional concrete foundations, preserving the natural terrain.

TECH-READY INTEGRATION

Easily integrates solar panels, AI systems, and smart home technologies for modern, energy-efficient living.

BUILT TO LAST

Designed for durability with a lifespan exceeding 100 years, reducing the need for replacements and minimizing long-term impact.

DISMANTLE & REUSE

Fully recyclable and reconfigurable, allowing for easy disassembly, relocation, or reuse of components.

RESILIENT DESIGN

Engineered to withstand earthquakes, hurricanes, and snow loads, offering safety in all environments.

PASSIVE HOUSE PERFORMANCE

Exceptional insulation and airtightness ensure zero energy loss, achieving Passive House energy efficiency standards.

LOCALIZED DESIGN

In collaboration with local architects, we build in full compliance with regional codes, climates, and cultural need.

INNOVATIVE ECO-HYBRID BUILDING SYSTEM (eco-HBS)

A smarter way to build — fast, flexible, and future-ready.

Eco-HBS PROCESS

Planning

- Collaborate with partners from the earliest planning stages.
- Provide insights on business strategy, income models, housing trends, promotion, and operations.
- Analyze consumer preferences and future residential trends with local real estate firms.
- Work closely with local architects on codes, lifestyles, and environmental factors.
- Consult local contractors on construction practices, timelines, and site conditions.

Material Selection

- Investigate local material markets and select economic, modern, and suitable materials.
- Prioritize local sourcing to match regional climates and lifestyles.
- Introduce quality materials from the U.S., Europe, or Asia as needed.
- HBS supports compatibility with all standard building materials.

Construction Planning

- Finalize assembly methods based on architectural drawings.
- Produce processing diagrams for each material.
- Estimate the required workforce.
- Coordinate logistics: delivery times, loading zones, site setup.
- Continuous feedback loop for improvement.

On-site Installation

- Prioritize worker safety.
- Inspect foundations and verify all materials upon arrival.
- Assemble structures according to a clear, simplified build program.

Quality Control

- Reduce errors through pre-processing, standardization, and simplification of all workflows.

LOCALIZATION

We localize every aspect — using regional materials, adapting to local laws, and assembling with local teams.
Our collaboration with local architects, builders, and real estate professionals ensures each building fits the region's regulations, culture, and environment.

APPLICATIONS

- **Residential**: National housing, ADUs, villas, deluxe homes, townhouses
- **Hospitality**: Eco-resorts, hotels, cabins, safari camps, chalets, glamping
- **Public Use**: Military barracks, classrooms, emergency shelters

For bulk orders, we can manufacture complete kits for delivery and rapid on-site installation.

ADVANTAGES

1. **Fast construction**:
   Less than100 ㎡ (1,000sqft) in 1 week, More than 100 ㎡(1.000sqft) in 2 weeks
2. **Customizable**: Variety of designs, layouts, and finishes
3. **Use of local, unskilled labor**: Efficient thanks to repetitive, prefab-friendly HBS components
4. **Affordable**: Costs are typically 50% of conventional local construction
5. **Climate adaptable**: Suitable for deserts, tropics, or polar regions
6. **Immediate build readiness**: No long manufacturing or shipping lead times
7. **Minimal infrastructure required**: No factory, heavy equipment, or complex logistics
8. **Global material network**: Access to innovative and economical options
9. **Flexible foundations**: Adaptable to diverse site conditions
10. **Disaster-resistant**: Engineered to endure fire, hurricanes, and earthquakes
11. **Standardized for scalability**: Convert to kit-type packages
12. **Technology Transfer**: Comprehensive support, from set-up to development

CONSTRUCTION COSTS

- Costs vary based on insulation, finishes, and regional economics.
- Lightweight construction allows for affordable foundation options.

- Use of local workers and materials significantly reduces expenses.
- Designed for cost efficiency with flexibility in material choice.

PARTNERSHIP OPPORTUNITIES

We seek exclusive partnerships in each country.

Our collaboration includes:

- Market analysis and model selection
- Joint material source (local & imported)
- Design co-development and regulatory adaptation
- Test production, technical support, and system simulations
- Co-branding, co-marketing, and joint business development

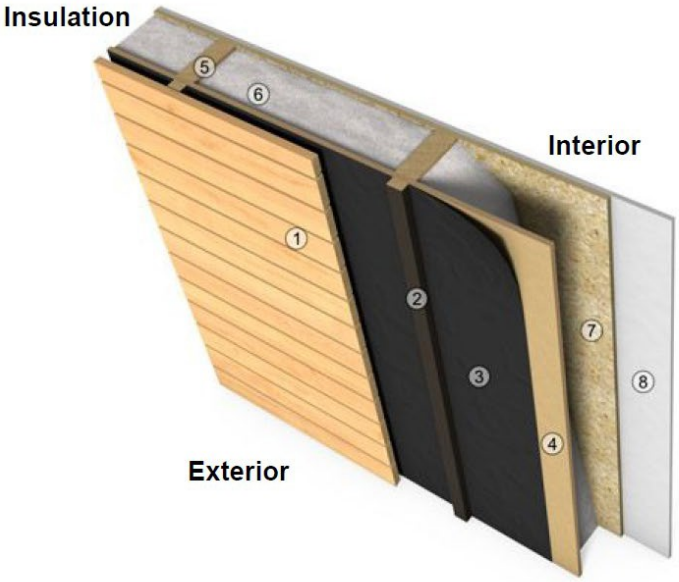
Business Model

- Exclusive regional rights with modest license fees and performance-based royalties
- Full support including local model house construction
- On-site dispatch of experts upon request
- Open to various partnership models tailored to your region

Ready to build the future together?

Partner with GEOTEC's Eco-Hybrid Building System.

Interior



GEOCABIN WALL & ROOF SECTION

Interior Materials

Gypsum board (Fire resistance)

Cement fiber board (Fire resistance)

Wood veneer

Wood louver

Magnesium board (Fire resistance)

Insulation Materials (thickness: 100mm, 150mm, 200mm)

Styrofoam board

Poly Urethane board

Rock Wool (Fire resistance)

Glass Wool (Fire resistance)

Exterior Materials

Cement siding (Fire resistance)

Vinyl Siding

Wood Siding

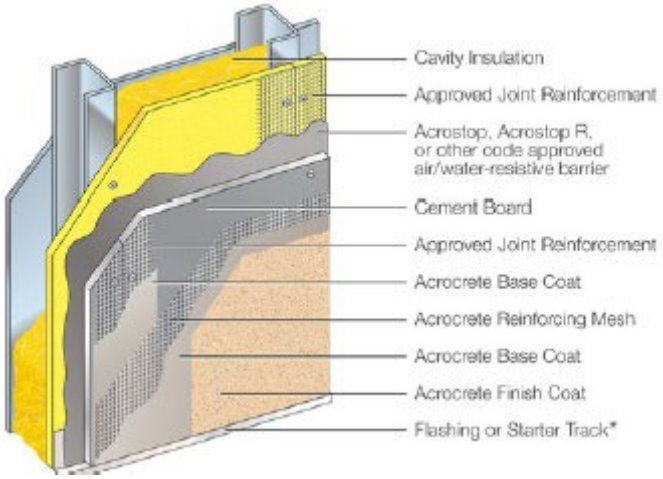
Cement board (Fire resistance)

Color Steel Plate (Fire resistance)

Brick (Fire resistance)

Granite (Fire resistance)

GEOCABIN WOOD FRAME STRUCTURE



GEOCABIN COLD-FORMED STEEL (LIGHT GAUGE STEEL) STRUCTURE

Wood frame structure

cold-formed steel frame structure

Exterior wall materials

Siding

Fiber cement board

Wood siding

Wood

Color steel plate

Brick

Roof materials

<BUILDING MATERIALS>

Wood Framing Lumber

2in X 4in X 8ft
2in X 6in X 10ft
2in X 8in X 10ft

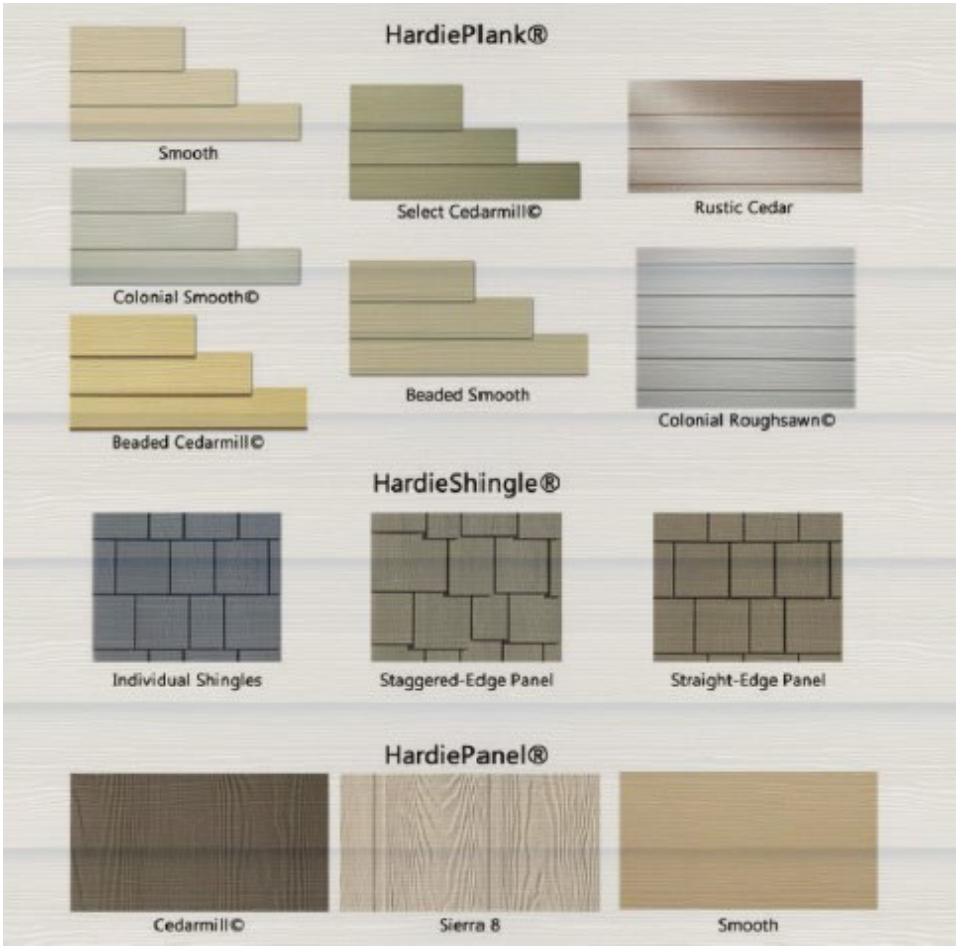
Light gauge steel

Fiber glass insulation

Waterproof membrane

House Wrap for moisture control

Exterior Fiber cement siding



Interior

Fire Proof Fiber cement board

Natural spruce wall panel

Interior Floor

Porcelain Floor Tile

Vinyl Waterproof Plank Floor

Engineered Hardwood Floor

Congoleum

Door & Window

Fiberglass Entrance Door

Hollow Core Flush Door

Vinyl Sliding Window

<Awards Good Design>