Container Homes:

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Designing Stylish, Sustainable, and Low-Cost Housing Solutions

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A house to call your own





History of the container

Why containers exist

- Solution for shippers
- Time & cost
- Inefficient loading of ships
- Corten steel
- Modular



Benefits

- They're relatively inexpensive
- Eco-friendly: Recycle, Reuse & Reduce
- Repurposing existing product
- Fast construction
- Sustainable design
- Durable structure

Design Considerations

Space Planning and Layout

- Innovative space planning to maximize efficiency.
- Creative interior layouts and floor plans.

Interior Design and Aesthetics

- Transformative
- Open design layouts
- Treatments & materiality to minimize or celebrate the container feel

Adaptable Architecture

Modular building element

Design Considerations

• Energy Efficiency

- Insulation (varies according to location & criteria per building code)
- Passive design strategies
- Green Technologies
 - Renewable energy solutions
 - Rainwater harvesting and wastewater treatment systems
- Building Codes
 - ICC & IBC

Affordability

Construction Cost Savings

 Reduction in costs from perspective of the building envelope & structure existing readily

Reduced Construction Time:

- Simple structures would have reduced construction timelines
- Pre-fabricated versions of container homes (out of the box)

• Long-Term Savings:

- Maintenance routine differs from that of traditional construction
- Introduction of energy efficient design in housing
- Need for insulation of building envelope may make for far more energy efficient housing

Case studies



LuxurySustainableDesignUnique

The Caterpillar House Santiago, Chile





- modern and sustainable container home
- 12 recycled shipping containers arranged pattern in a zigzag
- natural light and ventilation through skylights & large windows, minimal need for artificial lighting & cooling
- passive solar strategies
- containers are elevated to allow for minimal impact on surroundings





Shared spaces Large scale Sustainable Design

Keetwonen (Amsterdam Student Shipping Container Housing) Amsterdam, Netherlands



- one of the largest container housing projects globally
- approx. 1,000 recycled shipping containers
- each unit private bathroom, kitchenette, and living area
- Energy efficiency



Large scale
Private
residence
Industrial
aesthetic

Container Condo Queensland, Australia



- one of the largest single family dwellings
- 4 bedrooms, 6000 square feet
- 31 brand new 20'-0" containers, 6 months construction
- \$1.55 million Australian dollars in 2013
- climate responsive design





Affordable Private residence Sustainable Design

Containers of Hope Puntarenas Province, Costa Rica



- staggered views
- 2 40'-0" containers
- \$40,000 USD (substantially less than low-cost housing in Costa Rica)
- sustainable design, passive cooling



Private residence
Recycle, Reuse,
Reduce
Industrial
aesthetic

Zigloo Domestique Shipping Container Home Victoria British Columbia, Canada



- 3 years construction
- 2 bedrooms, 2 bathrooms & living space
- 8 shipping containers, modified on site
- comparable use of timber as usual Canadian House but remains in industrial finish
- bamboo flooring
- climate responsive design





Thank you

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