

Cargo-Structure

Sustainable Architecture

**Shane Pulak-Senior Project Engineer
NuEnergy Technologies**

Presentation Content

What is Cargo-Structure?

Advantages of Cargo-Structure

Identifying Cargo-Structure uses?

Cost of Cargo-Structure

Cargo-Structure Pre-fab

Biobased Insulation

Other Features & Options

L.E.E.D and Cargo-Structure

What is Cargo-Structure?

Using ISO shipping containers for the building and construction of various designs including but not limited to:

Residential

Recreation

Relief

Industrial

Institutional



A new term in the Design and Architectural field

Advantages of Cargo-Structure

No limit to design

Containers already provide primary floors, walls,
& roofs

100's of thousands of ISO Containers available

Promoting Recycling and Green Building design

Will qualify for L.E.E.D points

Fast to build

40% less costly than traditional building
practices

Very strong – Can resist most weather extremes

Resistant to fire, flood, mold



Cargo-Structure Uses

Residential homes - Urban/Rural/Cottage

Low income housing

Retirement homes

Student Dorms

Low Cost Urban
Office Space

Pop-up Restaurants or retail outlets for outdoor
festival events.



Cost of Cargo-Structure

Cost vary depending on design and size but are typically 40%+ less expensive compared to traditional stick building/dry wall houses

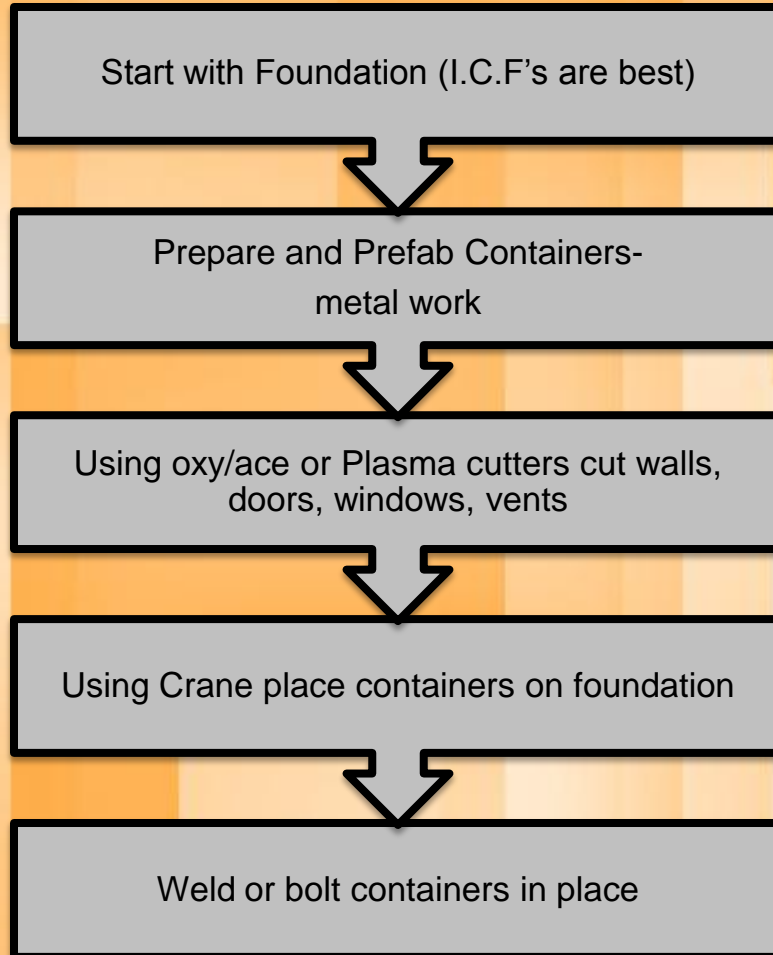
Finished Cargo homes cost \$55-85 per square foot

Generally de-commissioned Sea Containers cost \$1200-1500 per 40ft container (320sqft)

Typical home uses 6-8 containers \$8,500-10,000

Typical 2000sqft home finished design \$140,000

Cargo-Structure PreFab



Modifying ISO Containers



Construction Schedule



Bio-Based Insulation

BioBased Insulation naturally based - soy

Will seal a structure's thermal envelope

Will save up to 50% on heating and cooling when compared to fiberglass insulation

Biobased insulations will earn L.E.E.D points

5 ½" of insulation is sprayed on the outside of structure



Other Features and Options?

Using Renewable and Sustainable Products such as:

Bamboo flooring – Very durable, trendy, not expensive

Hemp-crete Stucco- Excellent textured look & Insulating properties

Roof top rain water harvesting and grey water recycling - cost savings

Heating options include, radiant floor heating, pellet stoves, thermal gain, sky lights

Roof Mounted Solar panels and hot water collectors can supplement energy cost up to 60%

Roof mounted Wind Turbines can supplement energy cost up to 60%

The savings on building cost allows for budgeting on the purchase of costly renewable energy products

Renewable Energy products usually has a payback of 8-10 years

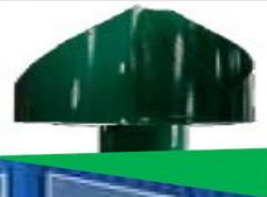
Cargo-Structure

Control Systems Engineering Space

PV and Hot water
collectors- Multiple
benefits



2 or 5kw
Magwind –
No vibration
most efficient
wind turbine



Examples Of Structures in Canada



Zigloo Keith Dewey Architect- Victoria B.C
Front View

Examples Of Structures in Canada



Zigloo Keith Dewey Architect- Victoria B.C
Back View

Examples Of Structures in Canada



Keith Dewey Inside View

Examples Of Structures in Canada



Keith Dewey Inside View

Examples Of Structures in Canada



Idekit Mansion St. Adele, Quebec

Examples Of Structures in Canada



Idekit Mansion St. Adele, Quebec

Residential and Cottages



Cottages and Eco-Resorts



Student Dorms



Pop-Up Fast Food



De-Centralized Power and Communication



Contact Information

NuEnergy Technologies

727 741-3569

www.nuenergytech.com

Shane Pulak, Senior Project Engineer

project.raft@gmail.com

Dr. Hector Guevara- CEO and Chief Scientist

hguevara@nuenergytech.com