

# USGBC GREEN CENTER

PineyWoods Branch

*It's Not A Box, It's an Office, It's a Library...It's So Much More*

# A Project With A View

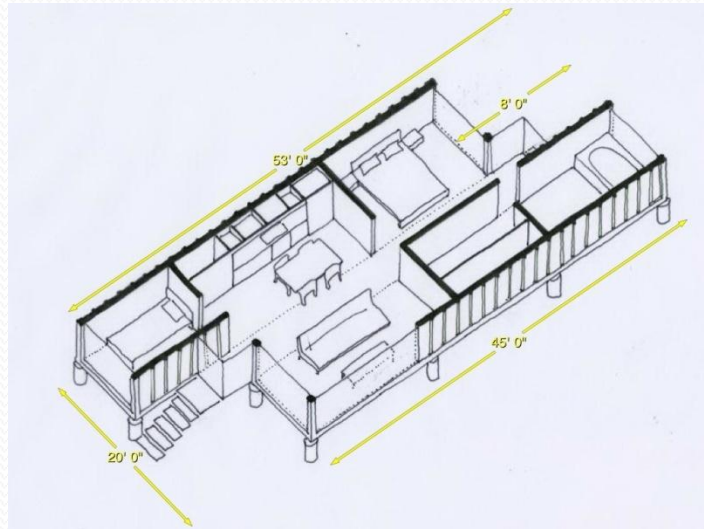
A demonstration home from used shipping containers



## Used As

- USGBC office
- Demo home
- Ref library
- Education lab
- Meeting space
- Green Resource Center

# The design is simple enough

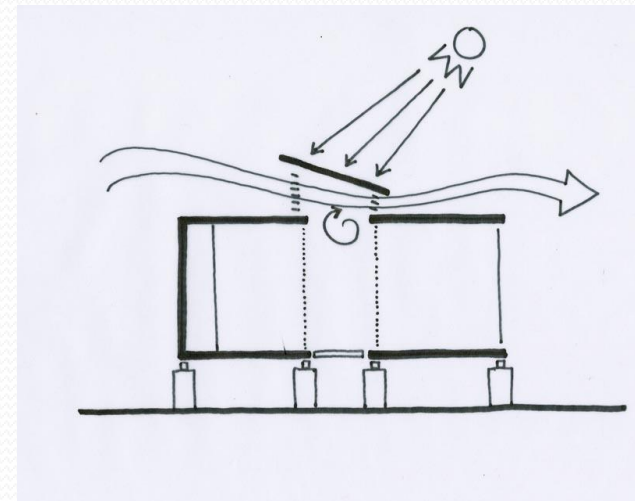


Site footprint required is  
20 ft x 50 ft

796 interior square feet

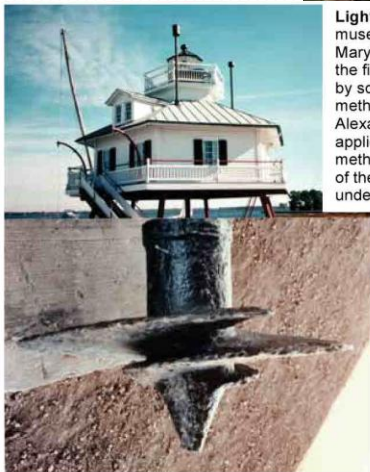
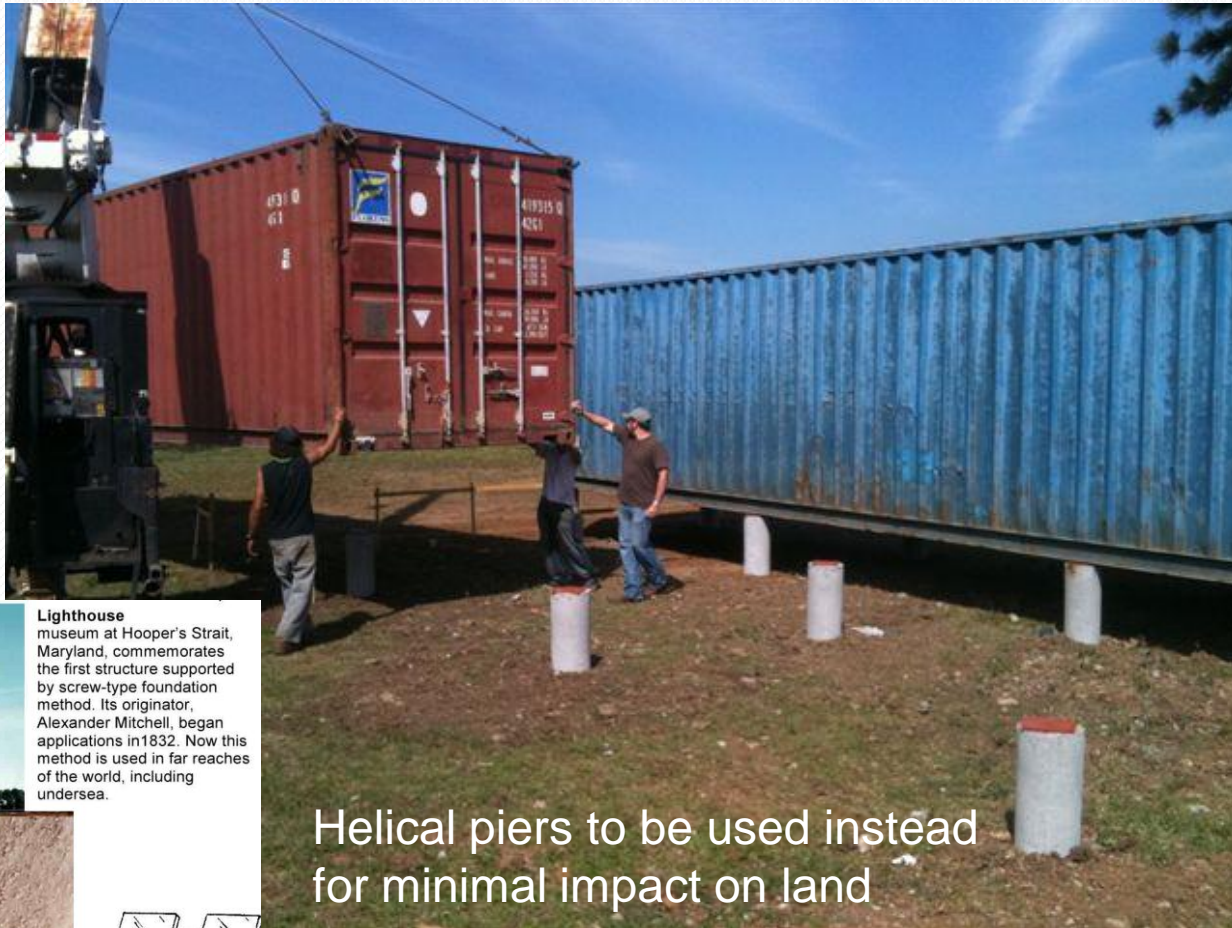
The home can be  
permanent or moved  
at a later date

| Container Type   | Interior Dimensions |      |         | Average Household Goods Weight Capacity | Volume   |
|------------------|---------------------|------|---------|---|----------|
|                  | L                   | W    | H       |   |          |
| E Container      | 42"                 | 29"  | 25 1/2" | 130 LBS                                 | 18 CFT   |
| D Container      | 58"                 | 42"  | 45"     | 450 LBS                                 | 63 CFT   |
| LDN Container    | 56"                 | 55"  | 57"     | 750 LBS                                 | 105 CFT  |
| Lift Van         | 87"                 | 45"  | 87"     | 1300 LBS                                | 197 CFT  |
| 20' Container    | 19'5"               | 7'8" | 7'6"    | 7,500 LBS                               | 1165 CFT |
| 24' Container    | 23'6"               | 7'8" | 7'6"    | 9,000 LBS                               | 1399 CFT |
| 40' Container    | 39'6"               | 7'8" | 7'9"    | 15,000 LBS                              | 2377 CFT |
| 40' HC Container | 39'6"               | 7'8" | 8'9"    | 17,000 LBS                              | 2684 CFT |
| 45' HC Container | 44'6"               | 7'8" | 8'9"    | 20,000 LBS                              | 3040 CFT |

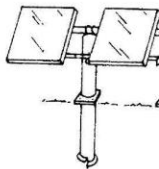




# It starts with a metal box.....



**Lighthouse**  
museum at Hooper's Strait, Maryland, commemorates the first structure supported by screw-type foundation method. Its originator, Alexander Mitchell, began applications in 1832. Now this method is used in far reaches of the world, including undersea.



Helical piers to be used instead for minimal impact on land



Extension

Lead Section

# ....that then starts to change



Built using  
conventional  
labor and  
materials



# into something liveable.....



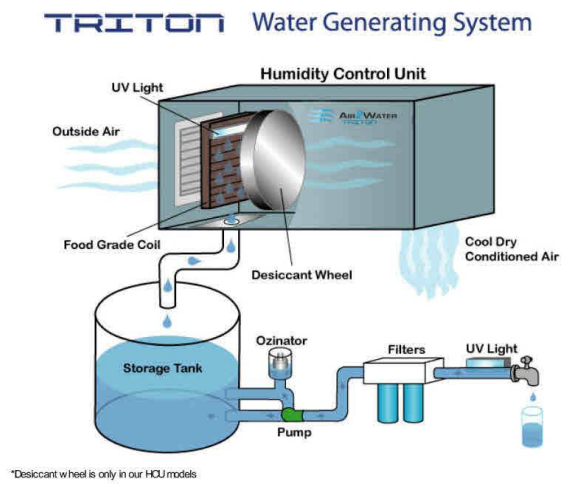
Sized for single or  
multifamily



# ....Utilizing Nature's Resources



Solar powered  
Airconditioning &  
heat



Water from humidity



Solar heated water



Solar/electric composting  
toilet



# with wide open views...



Use of environmentally friendly materials

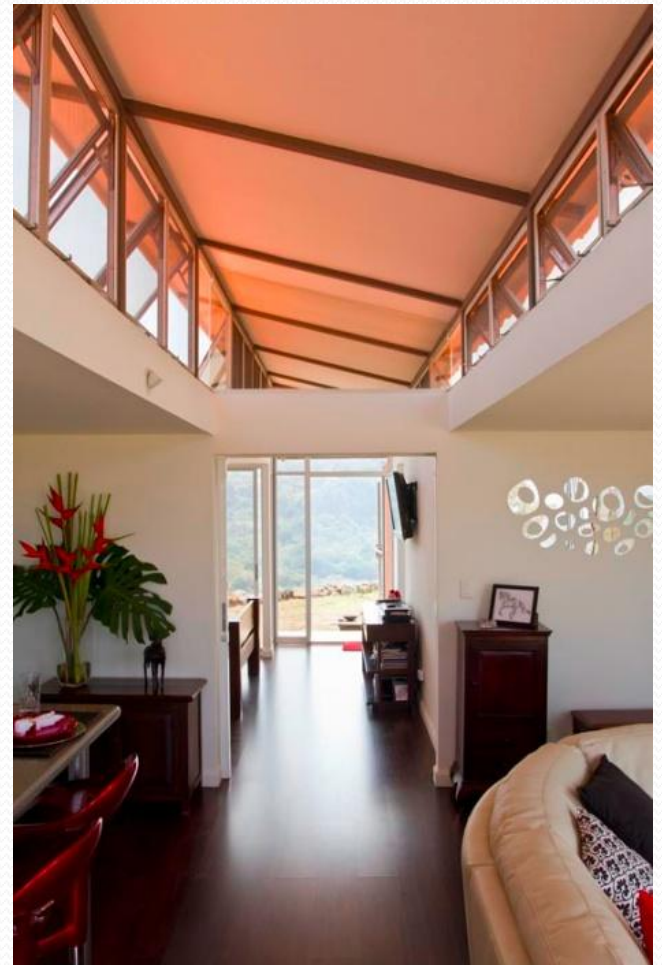
- Low VOC paints
- Marmolium laminate plank floors
- LED lighting
- Low-E double insulated glass windows
- Graywater recapture from sinks & shower



# ...that transforms into a home



- Hopper windows for fresh air ventilation
- Mini-split solar powered airconditioning/heat unit



# And becomes one with Nature





# Features

- Built from used shipping containers which then become the home itself
- Minimal footprint as the containers sit on helical piers
- Built with local labor and materials
- Adaptable to accommodate larger families
- Can be built as Net-Zero homes using solar energy
- Sturdy and weather resistant
- Affordable at a cost of \$50k+

Presented by: 3 Leaf Group – Construction Consultants for the Sustainable Environment

# Timeline

1. Project Presentations
  - Sept 26 - 30, 2011
2. Apply for funding grant from H-GAC
  - Sept 28, 2011 grant requests go out for proposal
3. LEED Workshop – October 1, 2011
  - Design chairette to take place to determine LEED for Homes rating
4. Legal review of project with Texas Gulf Coast Chapter
  - October 11, 2011 review with head legal council and branch members