

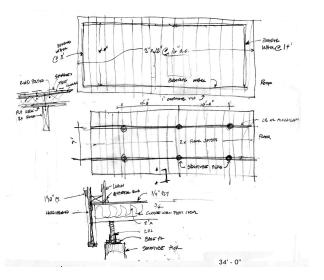
Richard T. Reep



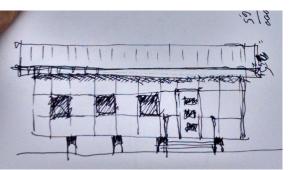
Vamo, Florida: historically small residences settled in the early 1900s, with a vacation residence by Mary Potter Palmer in 1908 still standing.

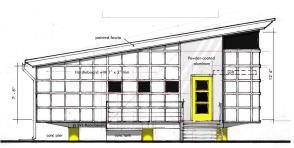
This was the last unfinished lot in the neighborhood.











Design evolution

Initial budgeting design.
Every space has 2 uses.
Reference Rudolph's
residences in Sarasota.
FHA minimum sizes
Climate response and site
orientation
Efficiency in use of materials



Design evolution



Staking out the plan during the design stage.

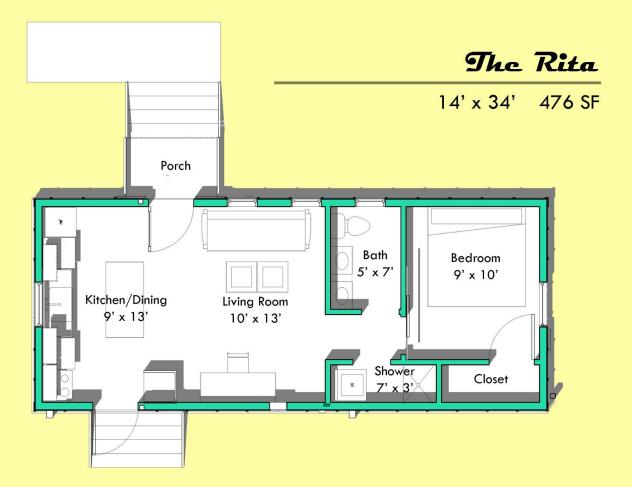
Wood frame base on site.



Construction







Sarasota School II

Minimize construction carbon footprint with piers lightly touching the land, wood frame for embodied carbon, and found objects such as farmhouse sink

Public functions free flow to create shared space

Manipulate strong coastal sunlight and respond to the site's microclimate

South wall limited openings Northeast upper corner least solar heat gain/maximizes natural light

Bath, shower, bedroom areas borrow from very small floor plans around the world

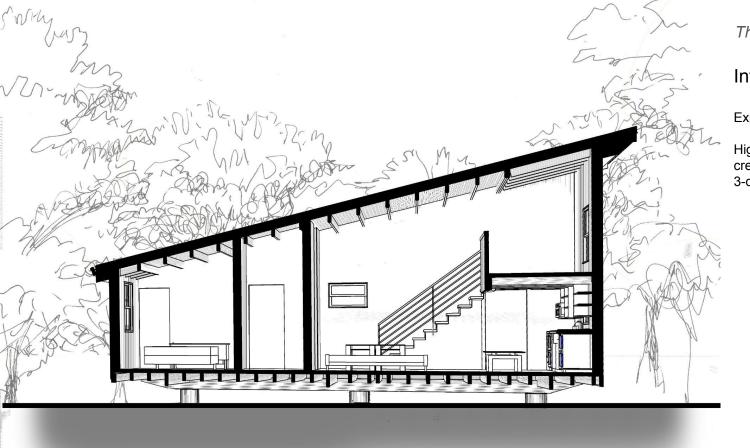


Completed 2016

Changes from the design

Added stairs to loft, increasing area to 561 SF

Changed some materials for budget reasons (exterior door surround is wood in lieu of aluminum)

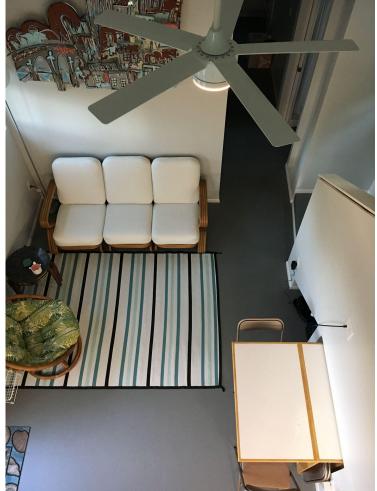


Interior Spaces

Exposed roof structure

High roof in public space creates complex 3-dimensional interior cavity





Quality of Light

Natural light is filtered to reduce power consumption for lighting; changes throughout the day

Every space has 2 uses: note the dining area which folds into niche under stair.

Views in late evening light

Left - view into living/dining/kitchen area

Right - view from loft.



Quality of Light

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Found Space

In a niche between wood studs, the recess forms a ladder storage.

Over the two wet areas, ladder hooks allow use of loft space above.



Quality of Light

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Some Lessons

Look outside traditional affordable housing solutions for innovation.

- Boat plans and mobile home plans offer efficient, multi-functional spaces.
- Use architecture to create ergonomic spaces designed around use.
 - Sliding doors, carve-outs between studs, lofts, storage under stairs
- Meets Fair Housing Act requirements for minimum dimensions and features

Proof of Concept

- The 50' x 100' lot in many older neighborhoods is still quite buildable
- Ownership vs. rental Hope VI demonstrated that a path to ownership is the best guarantee of eventual upward mobility.
- Cost per square foot was within typical new home cost, but the control variable is the quantity of square feet.
- A "machine for living in" should be built for today's contemporary lifestyle.