Sunset

Roost
The Dream
The Design

- Rectangle: $P = 195.2'$
- Octagon: $P = 160'$
- Square: $P = 183.2'$

$P = \text{Perimeter}$
Passive Solar - Priority One

The only free energy

- Solar Gain
- Thermal Mass
- Efficient Envelope
Efficient Envelope

Air Tight
No Thermal Bridges
R65
Scissor-truss Roof

24” Cellulose

10” EPS Foam under slab
Thermal Mass

Concrete Slab
Stone Work
- Planters
- Benches
- Masonry Heater
Solar Gain

Zero Space Heat Required
March 6 thru October 10
The Energy Plan

#1. Passive Solar Design
   a) solar gain
   b) thermal mass storage
   c) efficient envelope

#2. Renewable Energy

Wind, Solar PV, Generator Diesel

Lights, TV, Appliances

Radiant Floor Heat

Preheat Tank 50 gal

Domestic Hot Tank 120 gal

Seasonal Storage

Cold Supply

Fireplace

32 Batteries

Propane Heater
Utility Room
Masonry Heater
Cabinets, Drawer Pulls & Backsplash
Planters & Rivers
Guest 3/4 Bath

Dual flush toilet
Total Annual Energy Demand

(Two bedrooms, 1860 sq. ft., three people)

- Two cords of wood (space heat and domestic hot water)
- 20 gallons of diesel (electric generator)
- 180 gallons of propane (cooking, refrigeration and domestic hot water)
Efficient, Sustainable & Comfortable

• Efficient does NOT mean Spartan
• Extreme efficiency can create extreme comfort
• Sustainable is kind to the environment and your wallet
• Every house and house site offers unique potential for optimal energy solutions
• A home is a balance of energy systems
Sunset Roost

Thank You