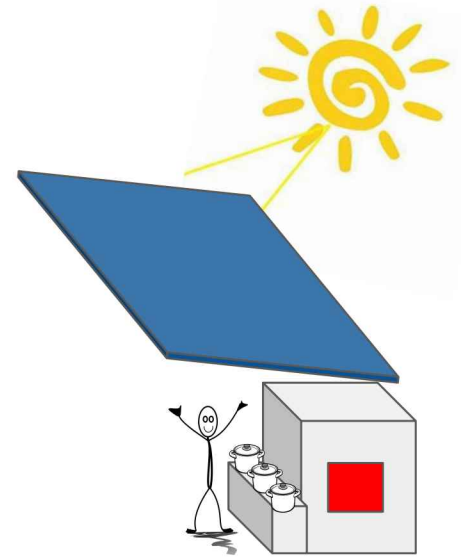


Solar Heat Bank Community Kitchen SHaCK



Zero Fuel Cost, Zero Pollution,
Community Designed, Built and Managed



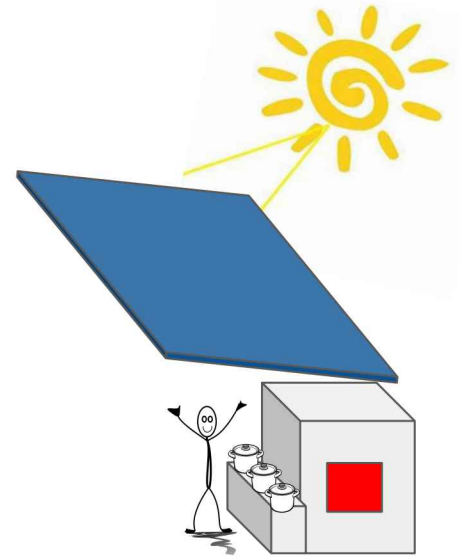
WasteFree23.org



<https://www.facebook.com/groups/permaculturepartners>

SHaCK Requirements

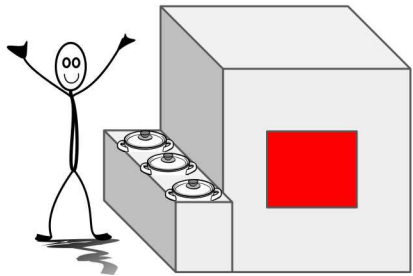
- Payback from fuel savings in 2 years or less
- 20 year + operational life
- No imported custom or unusual parts
- Local community can build, repair and operate
- Can operate 4+ days if PV or heat additions fail
- Can operate with auxiliary heat source if flash heating system fails



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70c water to go ss tube to be heated

Water pump - low volume

Superheated steam encircles pot - brazed onto pot for heat transfer

Cooking pot

Emergency heat source if needed



1. PV powers resistive heaters 5 days to reach 400 c
2. Cook can fry small items anytime in pot
3. To boil add water from 70c tank and food
4. Turn on pump = 70c water enters steam tube and super heated travels to 20psi relief valve after heating put
5. Panels

1. 10kw panels DC

DC power to 40 resistive heaters distributed in sand/dirt/rocks

Stainless steel tube 50 meters long in 400c sand

Pressure relief valve for low temp/condensed steam/Water drained here - to be reused or sold as distilled water