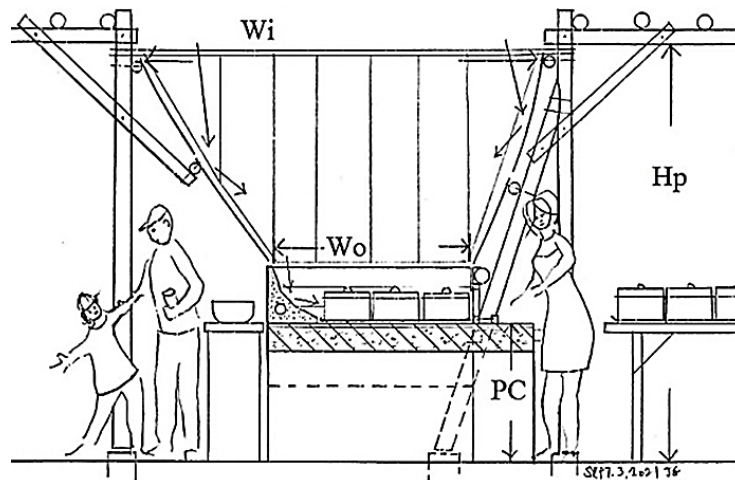


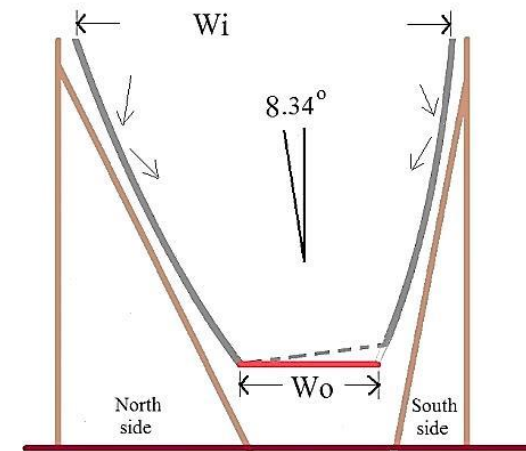
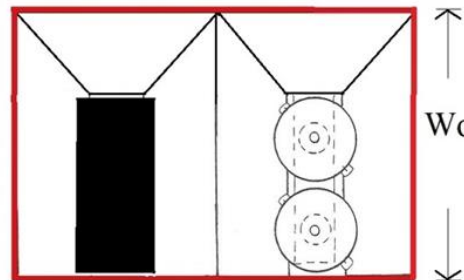
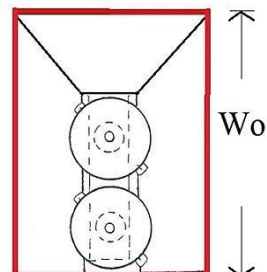
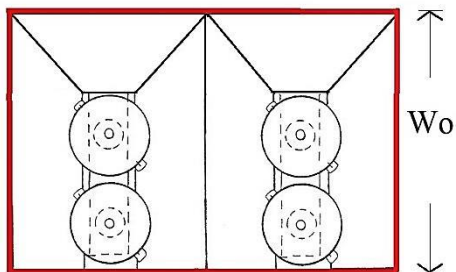
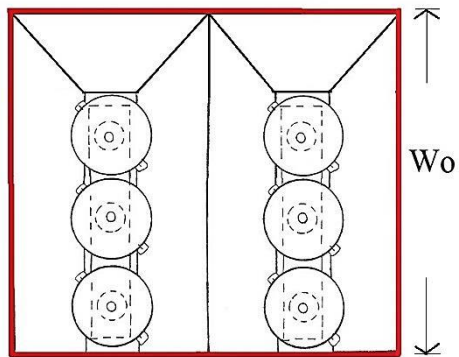
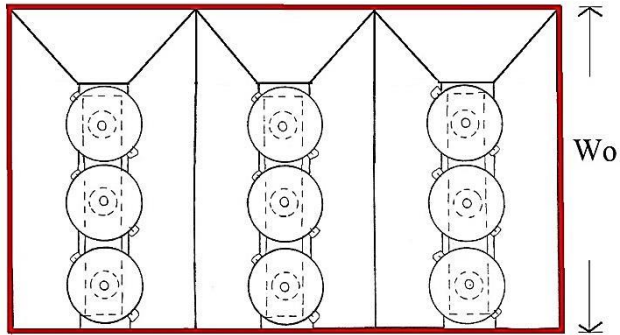
SITE PLAN OPTIONS



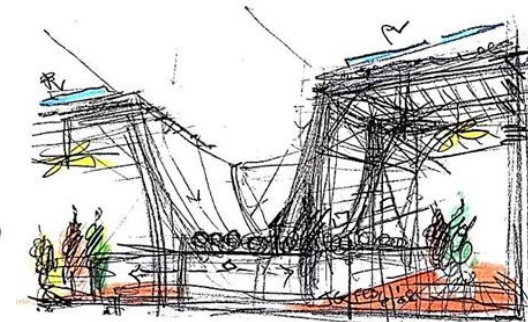
Solar access is required and surrounding buildings and trees could block horizontal wind loads.

Thru-Reflector-Wall (TRW) Nonimaging concentrator solar kitchen studies

Joel H. Goodman Sept. 7, 2021



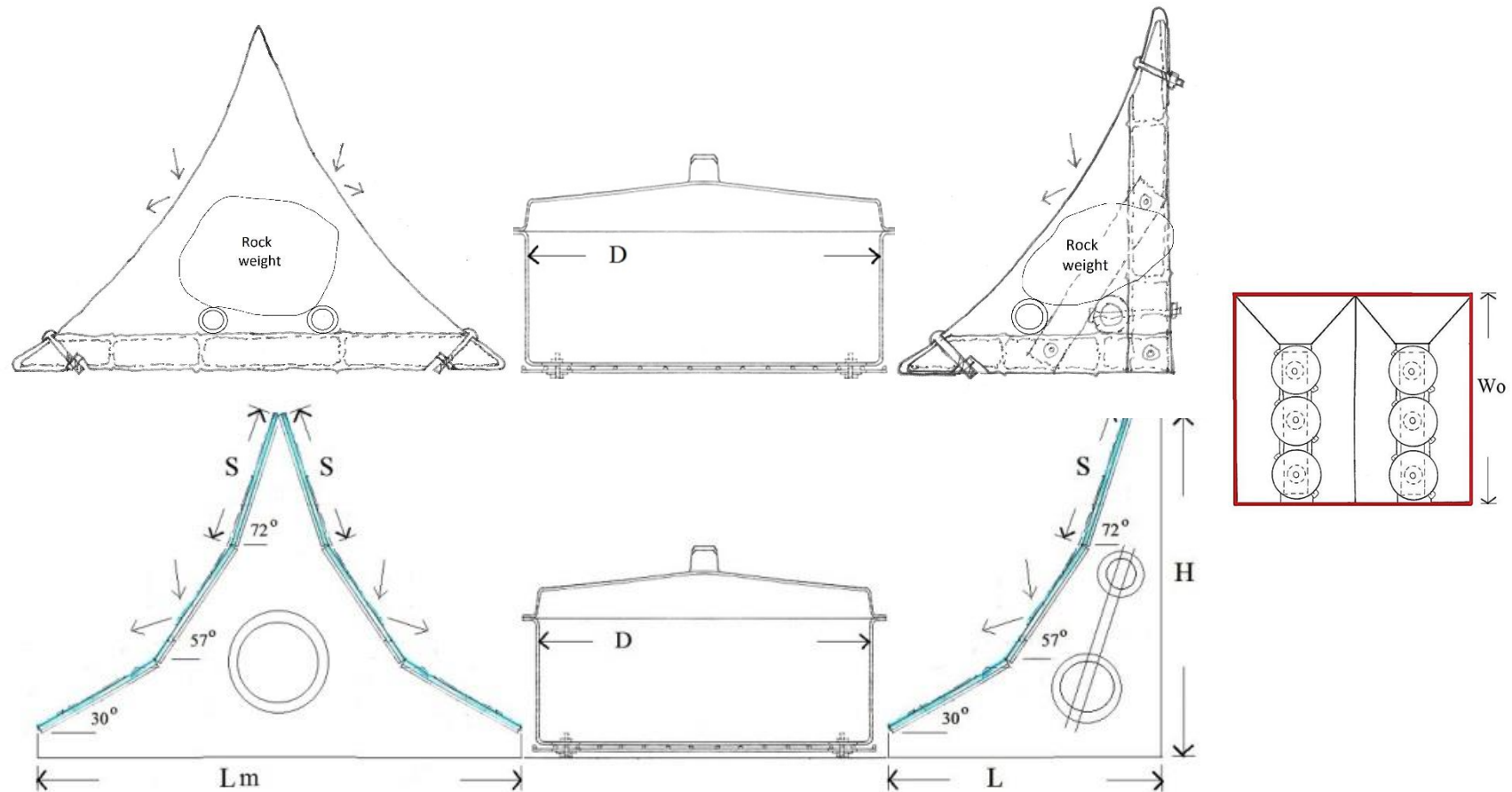
CPC reflector walls designed for latitude location and building integration factors. The site needs to have solar access for the collector inlet, not shaded by trees, buildings, etc. Blocking horizontal wind loads can be blocked by buildings, trees, etc. Areas directly adjacent to the solar concentrator that may receive dangerous concentrations should be protected for children, etc.



TRW Target Rectangle (TR) Options-PLAN view

Thru-Reflector-Wall (TRW) Nonimaging concentrator solar kitchen studies

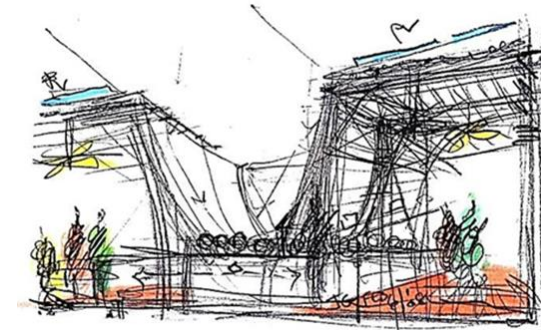
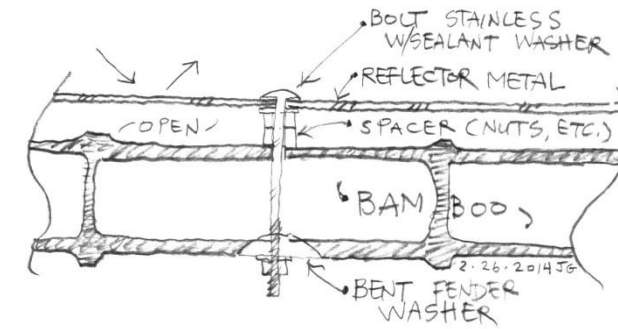
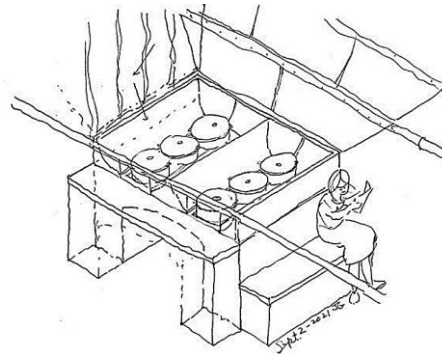
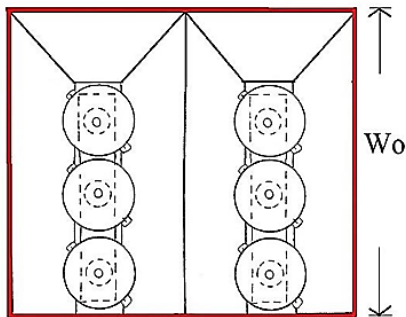
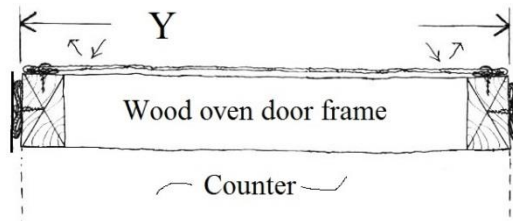
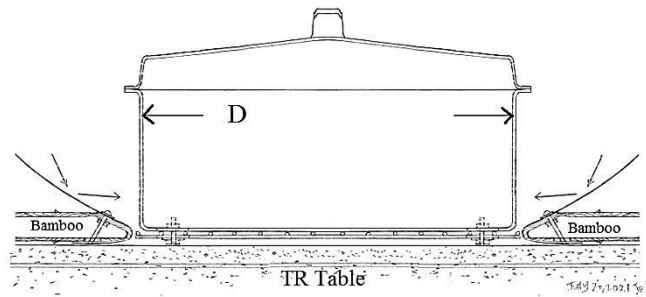
Joel H. Goodman Aug. 27, 2021



Alternative TR reflector to metal reflector and bamboo is flat glass or metal mirrors glued to precast concrete with bamboo reinforcement spacers to reduce concrete and weight. The precast concrete would stay in place on a masonry table/platform during wind storms. References for flat glass mirrors glued to concrete: [] Guigan, Gilles, John Harper, et al, Auroville Centre for Scientific Research Trust (CSR), "Auroville Solar Bowl Concentrator for Community Scale Steam Cooking", May 2008 Report, funded by the Government of India, Ministry of Non-Conventional Energy Sources (MNES). p88. and [] Celestino Ruivo, Portugal, flat glass mirrors glued to concrete solar cooker. Precast concrete would require careful mould wood work and laminated glass cutting, and metal reflector and bamboo weighted with rocks is suggested for a proof-of-concept prototype.

Thru-Reflector-Wall (TRW) Nonimaging concentrator solar kitchen studies

Joel H. Goodman Sept. 8, 2021

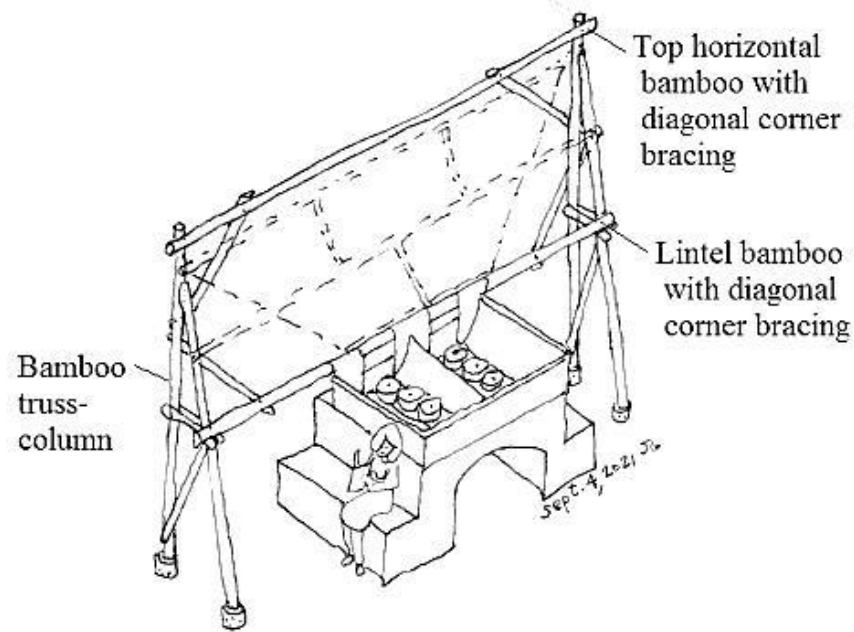


Dark pots absorb the solar heat energy.

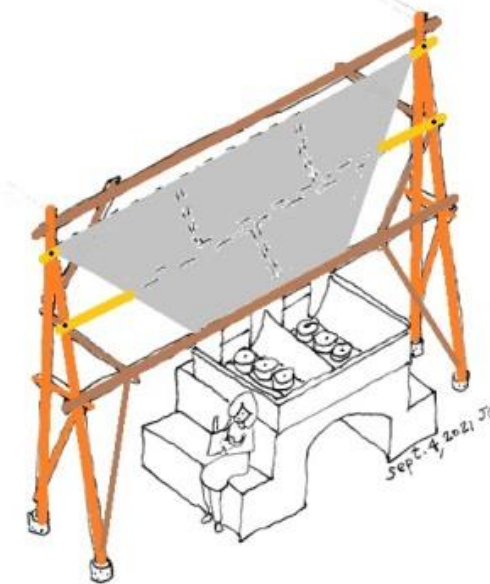
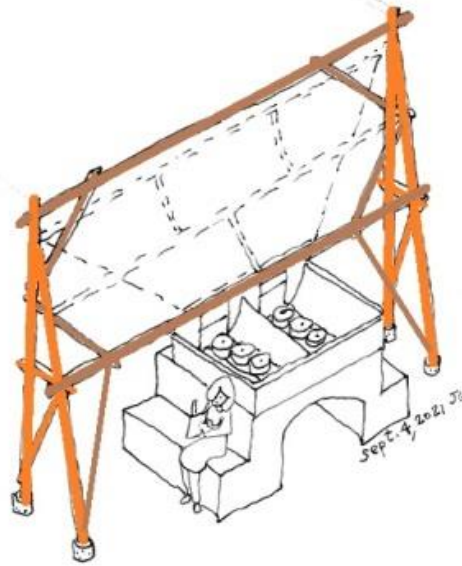
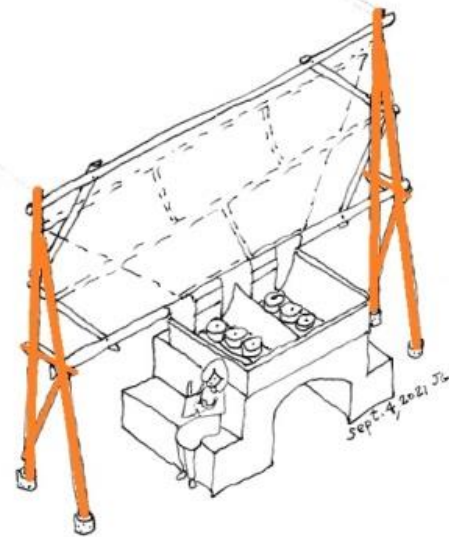
All wood in the caustic zone must be well protected because the solar concentration could ignite the wood.

Thru-Reflector-Wall (TRW) Nonimaging concentrator solar kitchen studies

Joel H. Goodman Sept. 8, 2021



Two truss-columns at the oven doors counter side have two fixed horizontal bamboo poles with diagonal corner bracing, a top horizontal bamboo and a lintel bamboo, which supports one side of demountable CPC reflector facets. The bamboo truss-columns anchorage to foundation details with moment (rotation) resistance is an area for study.



Thru-Reflector-Wall (TRW) Nonimaging concentrator solar kitchen studies

Joel H. Goodman Sept. 5, 2021