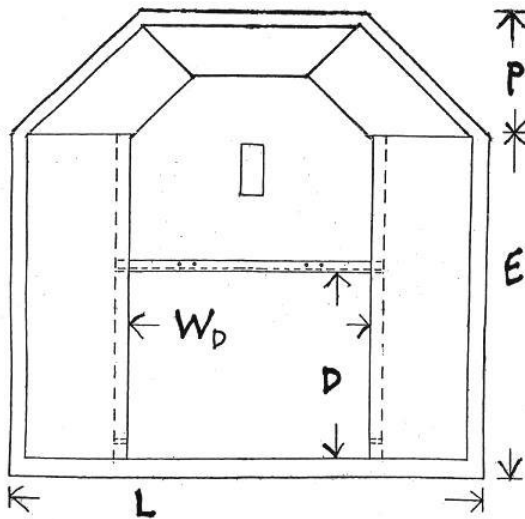
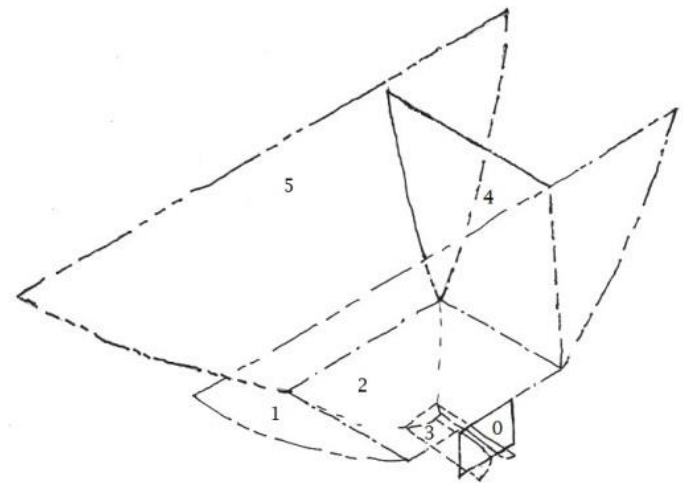
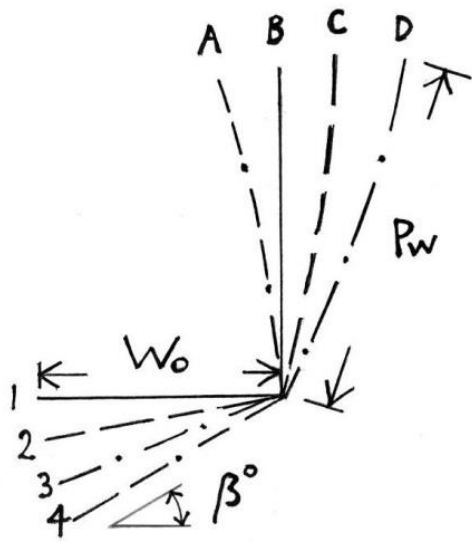


## Thru-wall solar cooker prefabricated parts

Two prefabricated parts that fit together are: a thru wall door frame CSEB masonry form; and an unglazed reflector box with cookware support grill. An intention is for large quantity production with bio-plastics and in-shop mirror tiling. An aim is to produce prototypes with ferrocement or other suitable prototype materials. Cookware sizes determine door clearance dimensions. A nonimaging solar concentrator may work well enough for a few cookware volumetric targets, for example, three HotPots™ in a line and two all-glass ~4" x 1m evacuated tubes. Dimension E is tall enough for upward door swing clearance. A thru-wall solar cooker has significant house plan and site design solar access factors, complicating house cluster and multi-story design.

JH Goodman Dec.18, 2014





A

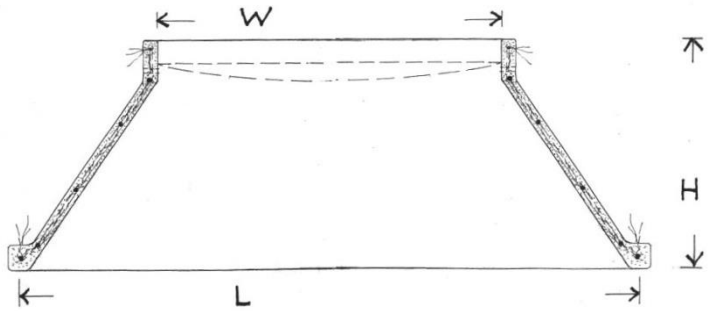
B

## Thru-wall nonimaging reflectors optical configuration

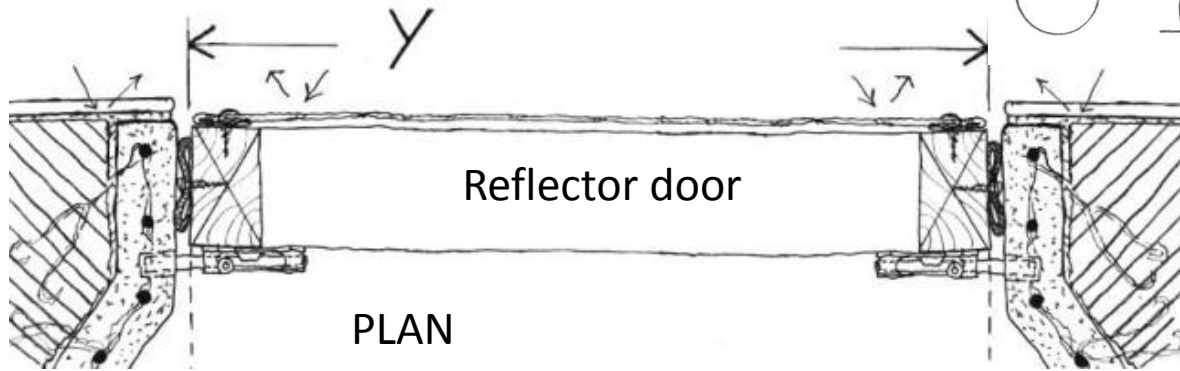
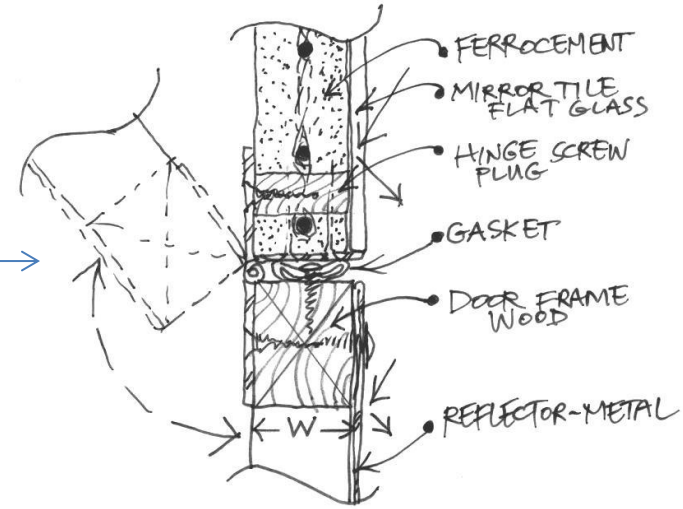
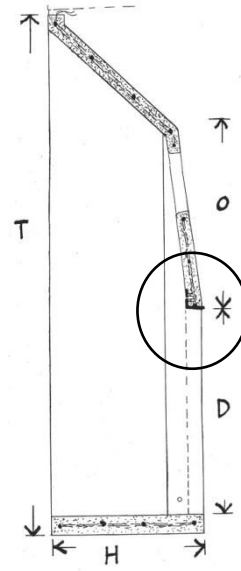
Nonimaging reflectors **optical-thermal design references** for selected regional latitude-range locations based on selected cookware and autoclave targets are needed for building technology studies.

**Nonimaging reflector concentrator thru-wall trough solar kitchen studies**

Joel H. Goodman July 7, 2014

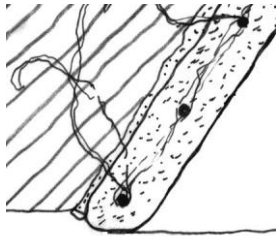


PLAN



PLAN

DETAIL AT TOP HINGED REFLECTOR DOOR  
 JG  
 DEC 10  
 2014



Thru wall solar oven door (wood ) ferrocement frame form for CSEB walls. Screw plugs for hinges can be replaced, and a metal strip drip extends as a ledge for the glass mirror tile above the door.

