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 TM 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
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
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.

JH Goodman               Dec 11, 2014