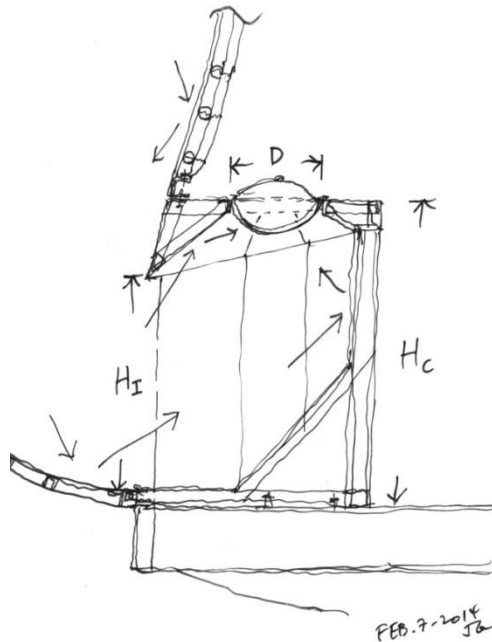


FEB. 9 - 2014 JG

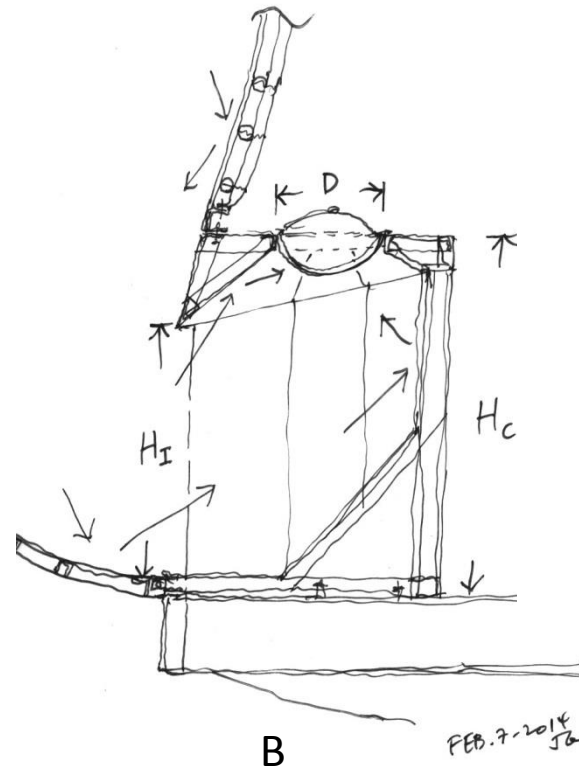
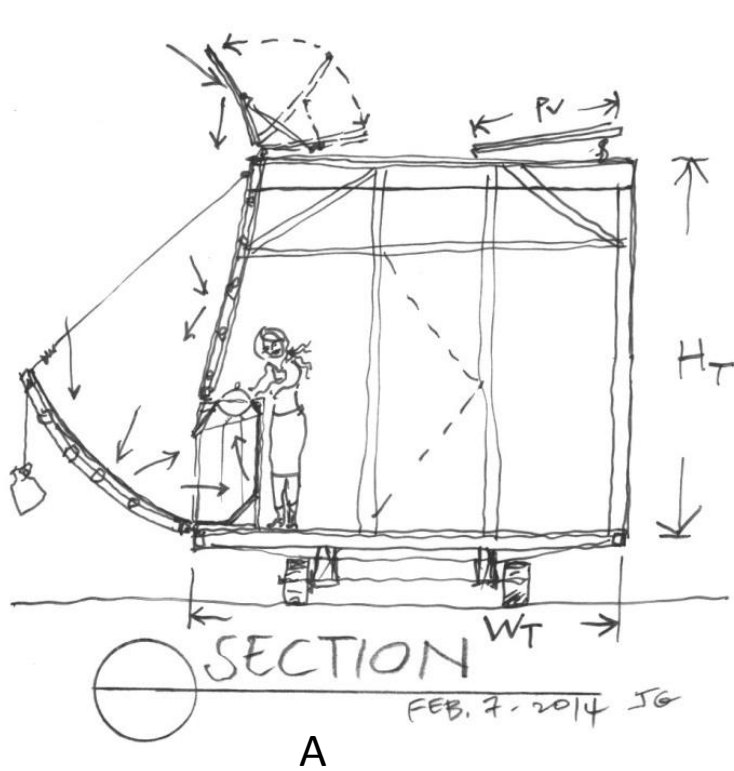


## Nonimaging Thru-Wall scoop concentrator studies Feb. 10-2014

An intention for these architectonic studies is that they become selected for engineering evaluations, and if evaluation results look promising, test facilities can be built for measurement verification. This could lead to support for demonstration buildings, and inclusion by developers and architects and designers for actual building projects.

The design of trailer or fixed building construction details would require preliminary design of optical-thermal reflector concentration configurations for reference, based on selected outlet targets (3 pound roaster from SCI, HotPot TM made in Mexico, molten salt storage with refraction concentrators, etc.).

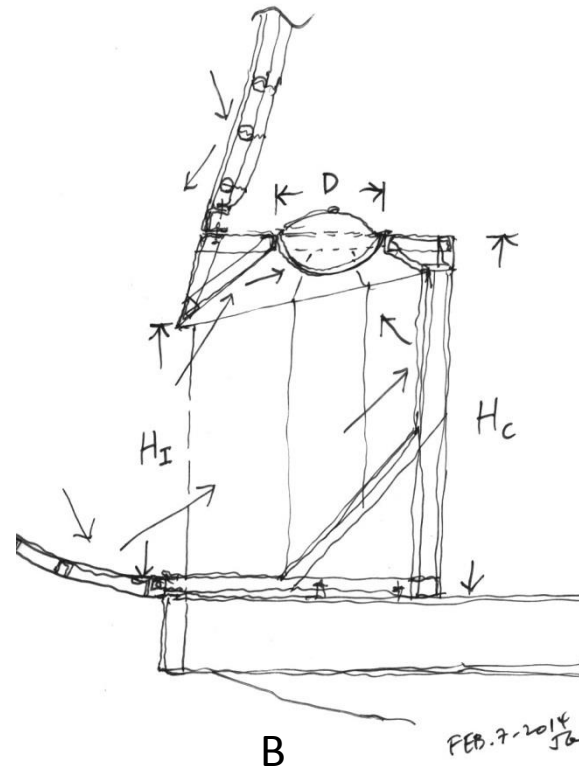
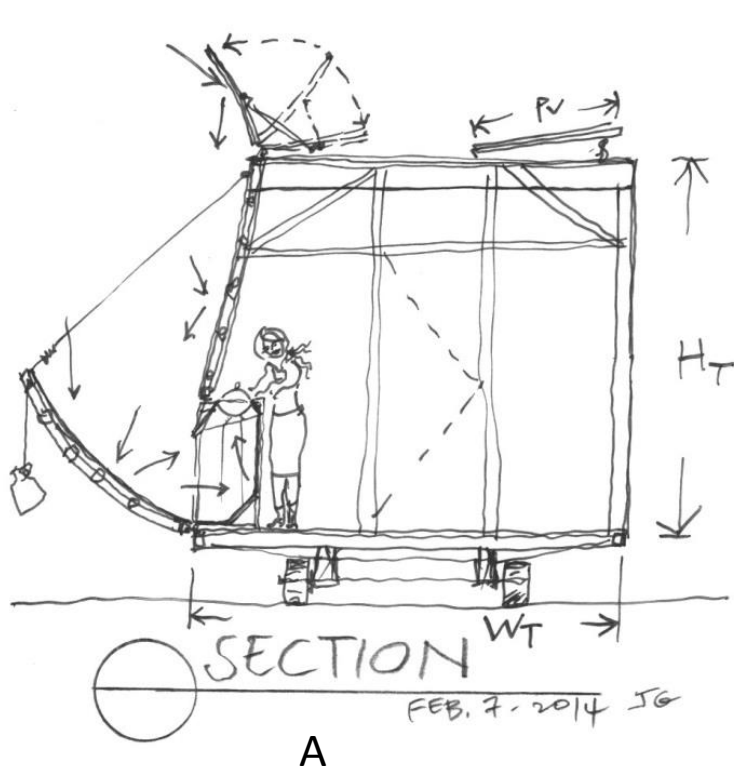
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Nonimaging Thru-Wall scoop concentrators trailer Feb. 9-2014

Nonimaging CPC type scoop thru-wall concentrators for cooking may be fitted with trailer sizing often limited by road rules (less than 12 ft widths) to pass under bridges. Trailer sizes may correspond to locally available platforms-chassis. Concentrator characterization may be different for trailers and site-specific buildings on foundation-soils. A trailer has counter-to-floor height with extension trough at trailer floor level (A,B). A building construction may have the bottom of the extension trough lower than the kitchen floor (C).

JH Goodman



## Nonimaging Thru-Wall scoop concentrators test facility Feb. 10-2014

The extended reflector CPC-type panels for a trough side may be pin bolted to the floor structure and held in position by tensioned cables with adjustable turnbuckles and hanging weights. A small trailer test facility may have two or three cooker outlets. An end fabric reflector moved at noon could decrease spillage.

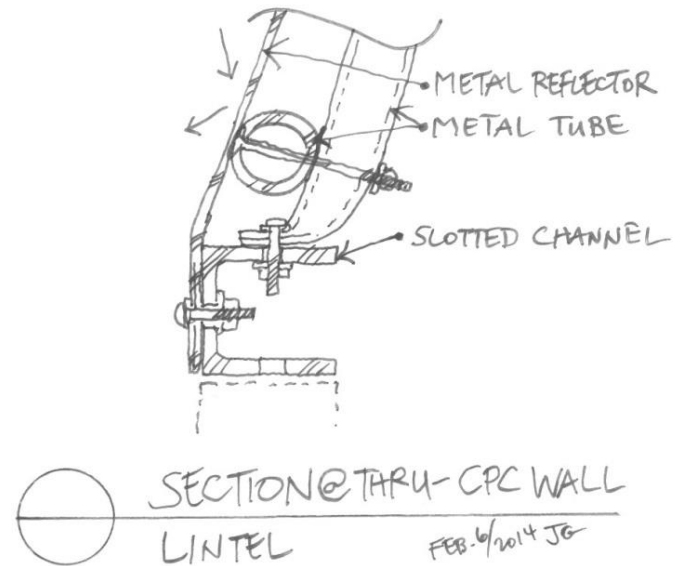
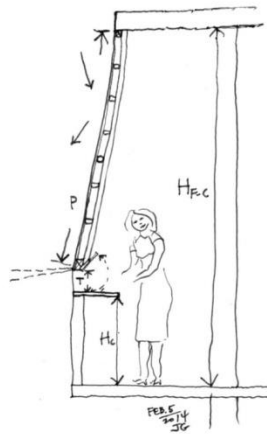
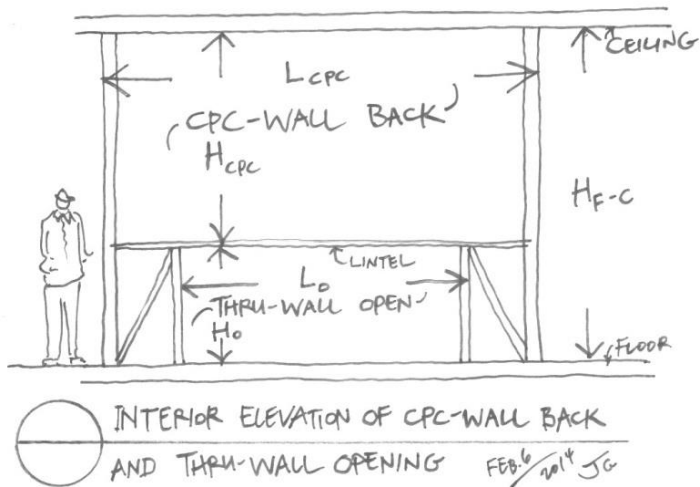
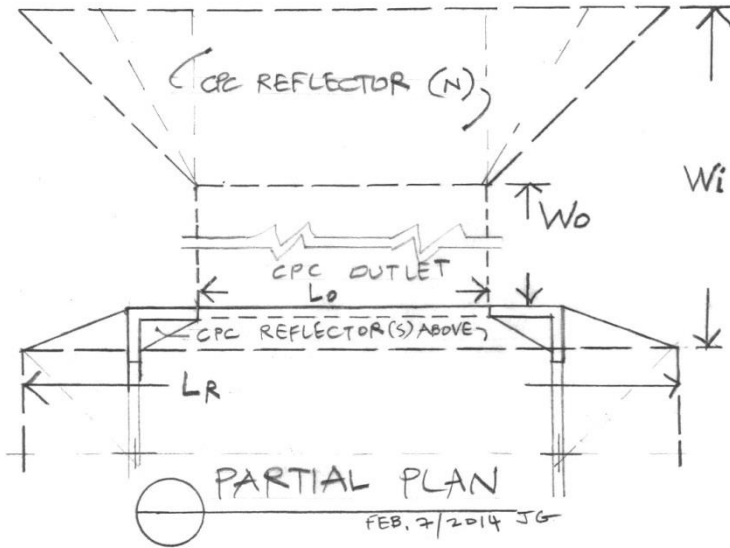
JH Goodman

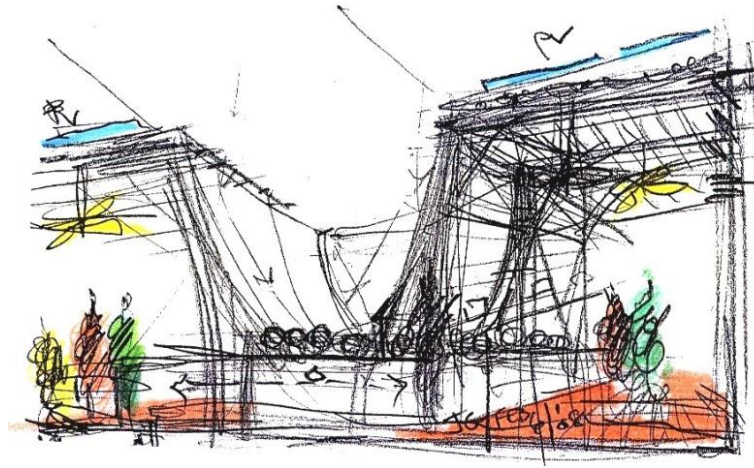
## Building-size CPC testing facility studies

Several experiments and tests of various collectors can be verified for selected CPC reflector areas by masking the CPC wall. Several thru wall opening sizes, shapes, locations and counter heights can be fabricated for the flexible open space under the CPC side wall lintel.

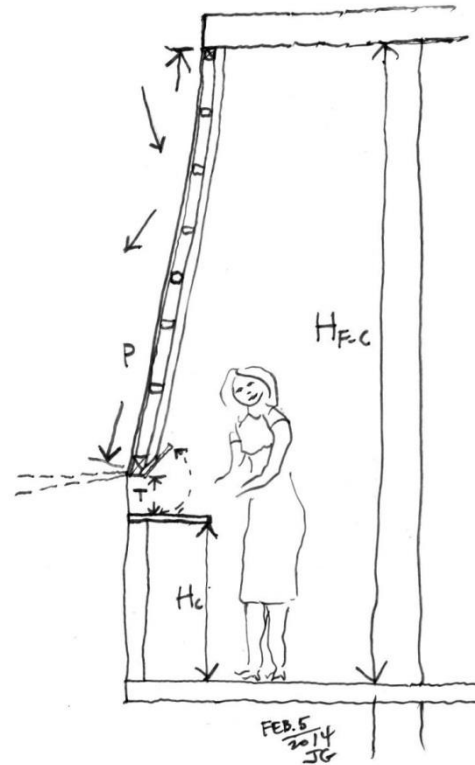
A CPC testing facility may be a building with a site specific foundation or a trailer with wheels.

JH Goodman Feb 7-2014





Building-size asymmetric CPC  
thru-wall kitchen



### Midsized experimental solar kitchen studies

An asymmetric building size CPC has an EW line of thru-wall receivers (Tolakatsin cookers, etc.). A south CPC trough side-wall for seismic regions has reflector sheet metal attached to a curved wall framing (P in section sketch). P is about two standard reflector metal roll widths minus overlap and connections for weather proof details, coordinated with counter height and floor to ceiling height.

JH Goodman Feb. 5-2014