

SOLAR COOKER TFL-0,61 *)

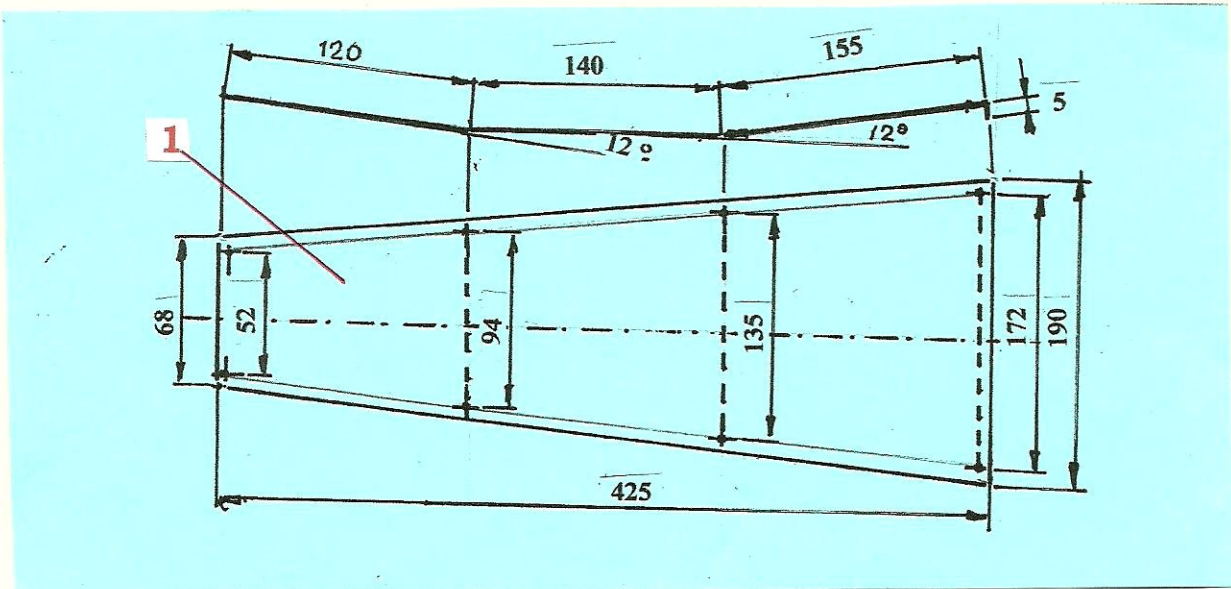
**TO HELP FAMILIES IN DEVELOPING COUNTRIES,
TO ELIMINATE CO-2-EMISSIONS, 1 TON IN A YEAR,
TO SAVE FORESTS, KEROSENE AND CHARCOAL**

*) 0,61 is the aperture area m² of sun radiation



SHORT BUILDING INSTRUCTIONS

Reflector

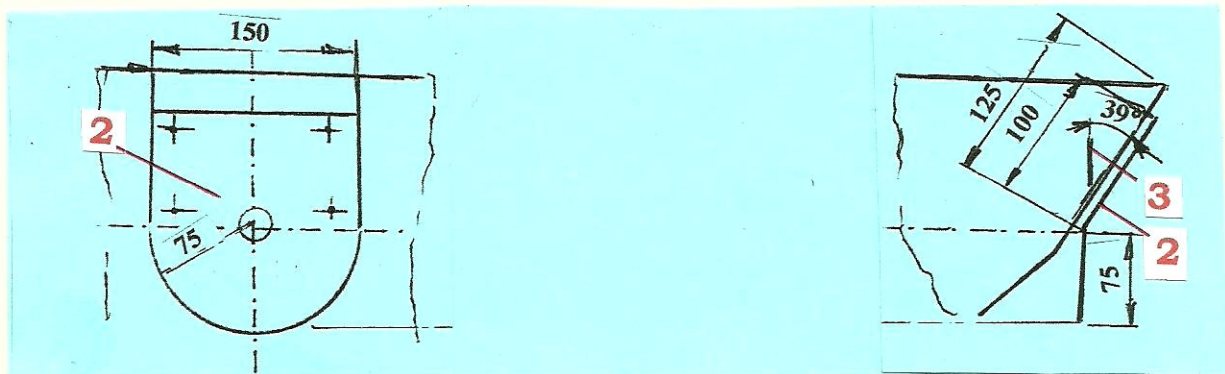


For the reflector sections (1) the highly reflected, anodized aluminium sheet, thickness 0,7 – 0,9 mm (like ANOFOL) is excellent material and available in most countries. Recycled sheets, for ex. from used fluorescent lamps, is recommended!

First make the template with accurately 4 mm holes after the drawing. Then cut and drill all 16 sections and bend the sections according to the lines (- - -)

For assembly use 65 M4 x 5 (mm) screws.

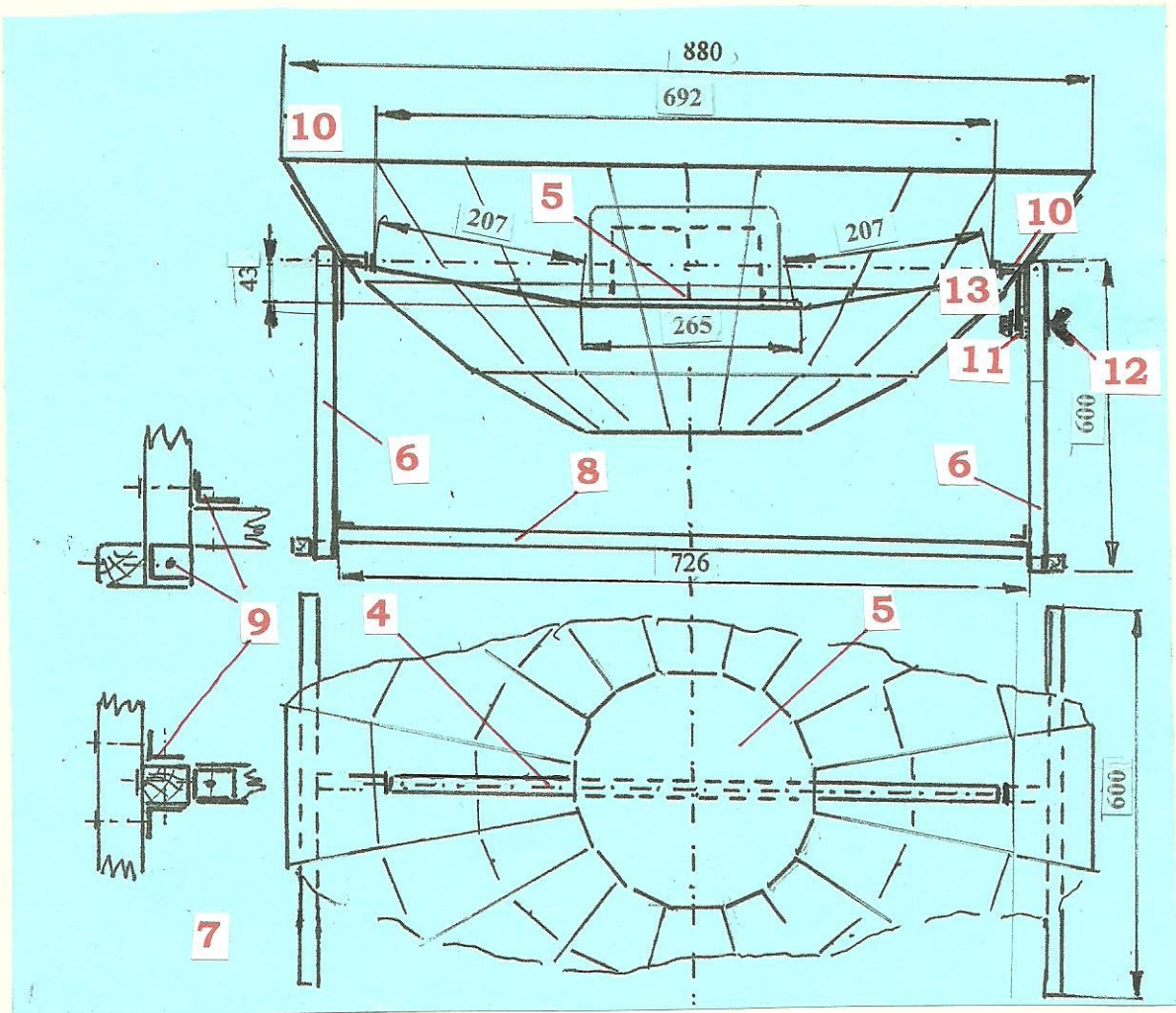
(The second alternative is to cut the sections after the marked points (+) and tape the seams on both sides with strong tape. The material of the sections can be plastic sheet, 3-5 mm (like Propwell) and the surface can be taped or glued with reflecting foil (like from 3M).



Make 2 fasteningplates (2) 150 x 200 mm from 1,5 mm aluminium or steel sheet, drill the hole 15 mm in the middle and four 5 mm holes in upper part.

Drill 2 holes 15 mm in receiver 125 mm from the upper edge of the receiver. Install the fasteningplates with M5 x 10 screws and the alignment pin (3) for 39 degree

Supporters



Cut and bend the potsupport (4), 736 mm long of 4x20 (or 3x25) steel following the drawing. Drill 6.5-7 mm holes in end of the support and two 5 mm with 265 mm distance for fasten the 1,5-2 mm black plate (5), diameter 265 mm in the middle.

Saw 2 wooden battens (6) 25 x 25 x 600 mm, 2 battens (7) 25 x 25 x 600 and the middle batten (8) 25 x 25 x 870 mm.

Make 6 corner steelfastenings (9) 1.5-2 mm x 25 x 25 mm. with 6 mm holes.

Find the tubes (10) 15 mm outside/ 8-11 mm inside, length 25 mm for the hinges.

Final assembly

Fix the battens 6, 7, and 8 together with the fastenings 9.

Install the potsupport 4, the tubes 10 and the battens 6 together with M6 x 70 bolts.

Install the washer (11) 2 x 8/40 mm, the bolt 6x60 mm and a wing nut (12) together

Put a small filling pease (13) 15 mm between the fastenerplate and the batten.

The pot, 3 litre, must have a lid, black surface and straight bottom.

Now you have a cooker for 20 years at least. It cooks 2 litre of water in 50 minutes.

For several dishes and for bigger amount of food an extra hay-box is useful!

Thank you for your interest! For more information and questions contact us!

Technology for Life, Helsinki, tep@kaapeli.fi
The time for solar cookers is now!

