Do It Yourself. Svante Freden foldable Reflector Oven

Material: 1 mm aluminium, 2pcs 500x250 mm, 1pcs 250x150 mm.

Long hinges ca:1700 mm. Rivets 2-4 mm ca: 90 pcs
6 screws and nuts, same diameter as the rivets.
3 mm wire 900 mm.

Start by making a mock-up of the oven with paper and tape so you can see how it looks and works and that you are satisfied with the size.

When you are satisfied with the dimensions, cut out the pieces from the sheet, let the backwall wait.
Start by mounting the sides, clamp the hinge and sheets so they do not move when you drill. Rivet the sides together, Be sure the rivets are clear from each other when you close the sides (flatten the rivet heads if necessary).
Put all six pieces together as shown in the figure "folded down", and drill through the whole package for the outer hinges.
Rivet three hinges fully, but only one side on the fourth, and use bolts and nuts on the other side, so you can open it again.
Now cut out the backwall, but let it be a little bit too big so it tightens the sides. Put the hinge on the inside of the bottom. Don’t rivet yet, use screws and nuts. Test to fold and unfold.
Make a little locking tab 12x25 mm to rivet on the backwall. Cut a slot for the locking tab in the top.

Make two pieces 12x25 mm to hold a handle on top. Shape a handle from a piece of wire and rivet the holder pieces.

Now to the grating. Make a teststick 2cm shorter than the front, test with the stick to see where it reaches both sides. There you can drill a hole 4 mm, in each side. Drill another hole ca, 90 mm from the first hole and parallel with the middle of the sides. Make the grating in a U-form so you can put it in from the outside and it comes out on the other side, but short enough so that you can lay it on the inside of the oven when the oven is folded.

This reflector oven design is a do-it-yourself version of the oven that I build. My oven has integrated hinges which cuts down on weight and gives a nice clean look without sharp edges.

Design and construction:

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