Icarus’ Feathers Solar Heat Collector Construction Steps

Materials:
- 3 2’x4’x8’
- 8 3” self-tapping wood screws
- Large sheet of plywood
- 60 1” wood screws
- 1 1”x2”x8’ furring strip cut to 45”
- 4 2’x8’ Polycarbonate sheets
- DC Fan
- Thermoresistor
- Wires
- Switch
- About 300 pop cans

Tools:
- Soldering Wand
- Electric Drill
- Screw wrench
- 4” hole saw
- Circular saw

Major steps:
- Cut 2x4s into 45” sections.
- Lay out the boards into a box formation.
- Pre-drill holes into 2x4s.
- Screw boards together in their formation.
- Sheet the frame with 4x8’ plywood.
- Put in 1” wood screws every 5 inches.
- Cut a 1x2x8 into two 45” sections.
- Attach a 1x2x8 to form with screws on the inside, 8” up.
- Pull the can tabs.
- Drill a whole through the cans
- Wipe down and clean the cans
- Find the midpoint of the cans and draw a line
- Add caulk across the line
- Slide in the cans
- Paint the interior of the heat collector.
- Drill the 4” diameter intake and outlet into the back of the heat collector.
- Build the circuit of a thermal resistor, switch, and fan.
- Install the electronics.
- Attach the polycarbonate sheets to the front of the heat collector.
- Install the heat collector on a south facing wall.
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- Enjoy infinite, pollution free heat!

Photo gallery:
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- Find the midpoint of the cans and draw a line.

- Add caulk across the line.
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- Slide in the cans.
- Paint the interior of the heat collector.
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- Drill the 4” diameter intake and outlet into the back of the heat collector.

- Build the circuit of a thermal resistor, switch, and fan.
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- Install the electronics.
- Attach the polycarbonate sheets to the front of the heat collector.
- Install the heat collector on a south facing wall.
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