

http://www.hauntedlane.com/projects/fog-on-rocks-redux/

# Fog on the Rocks... Redux



The Fog on the Rocks chiller is a great design by Deathlord. Its cheap to build and works really well. Throw in a couple bags of cheap cube ice and you can chill fog for hours. The particular chiller design works best with fog machines under 700 watts. If you have a larger fog machine, you should check back in a few weeks for a larger garbage can based chiller I am building right now. I plan on putting a full how to on the web for it soon. Anyway.. lets get building.

## Shopping list for this project

- 48 quart Coleman Cooler normally available at Walmart or Kmart
- An 10ft section of 2"black ABS pipe Home Depot or Lowes
- An 10ft section of 1/2" PVC pipe Home Depot or Lowes
- A section of hardware cloth (like chicken wire but with small square holes) -Home Depot or Lowes
- Four 1/2" PVC T Joints Home Depot or Lowes
- Four 1/2" PVC 90 Deg Joints Home Depot or Lowes
- One 2" ABS Y pipes Home Depot or Lowes
- Two 2" ABS Couplers Home Depot or Lowes
- Two 2" Male Threaded/Slip ABS Fittings Home Depot or Lowes
- Two 2" Female Threaded/Slip ABS Fittings Home Depot or Lowes
- Two 1" Latches Home Depot or Lowes
- Roll of door/window weather stripping Home Depot or Lowes
- PVC Pipe glue Home Depot or Lowes
- PVC Pipe cleaner Home Depot or Lowes
- One tube of Silicon Caulk Home Depot or Lowes
- Four or Six small zip ties Home Depot or Lowes

# **Tools Required**

- Screwdriver to screw in the latches
- Drill and a 2 3/8" hole saw
- Metal snips to cut hardware cloth

So you want to build a Fog Chiller? Well get your butt to the store and pick everything up!

I believe the last time I built one it cost 30-40\$ in materials.

# Step one: Our Coleman cooler needs two holes drilled in it.



One on the long side of the unit and another on the one of the shorter sides (not the side with the drain hole).



You will need a 2 3/8" hole saw to drill the holes in the cooler. The hole saw cuts through the cooler like butter so go slow, and make sure you line the drill bit up so its level.





The center of the hole on the long side of the cooler should be 3 3/4" from the bottom of the cooler and 3 1/4" from the side. The center of the hole on the short side of the cooler should be 3 3/4" from the bottom of the cooler and roughly centered between the two sides.

Fog will be injected into the hole on the short side of the cooler and come out the hole on the long side of the cooler.

## Step Two: Lets get some PVC fittings in those holes.





You will need a 2 short lengths of Black ABS pipe cut - figure 2 1/2" each. Take your PVC primer and glue and glue a male 2" threaded/slip fitting on the end of each 2 1/2" piece of pipe.

Insert the glued pipe and fittings into the 2 3/8" holes you drilled in the cooler (PVC glue sets up VERY Rapidly ~ 30 seconds, you must work quickly once you apply the glue). The threaded portion should be on the outside of the cooler.

Now take the coupler fittings and glue them onto the portions of pipe that extends into the cooler. Make sure you push the pieces together to get a nice tight fit. Use your caulk around each pvc pipe to make a nice seal with the plastic of the cooler and your fittings.

#### Step Three: Building the inlet and out port pipes.



Two pipes are needed to get the fog from your fogger into the system, and direct the chilled fog out of the system. The inlet pipe consists of three pieces: A female 2" threaded/slip Black ABS fitting, a 2 1/2" piece of Black 2" ABS pipe, and a 2" Black ABS Y



pipe. Glue the Y pipe with your PVC glue to one side of the 2 1/2" piece of pipe, and glue the fitting to the other side. This forms the inlet pipe.



The output pipe consists of two pieces: A female 2" threaded/slip Black ABS fitting, and a 1 ft section of 2" Black ABS pipe. Glue the Female fitting on the 1 ft section of pipe using your PVC glue as in the picture below.

The inlet and output pipe should now screw onto the cooler fittings.

#### **Step Four: Building the Ice Tray**

Cut the 1/2" PVC pipe into the following lengths:

- (2) 7 3 /4" rails
- (2) 11 1/2" rails
- (4) 2 5 /8" spacer
- (4) 7" leg-long



Using the 90 deg and T fittings, join all the pieces together and check for fit in the cooler. Once you are happy with the fit, bond everything using PVC glue.



Next break out the hardware cloth (chicken wire like mesh) and cut a piece the same size as the PVC tray. Zip tie the mesh onto the tray. Insert the completed ice try into the cooler and check for fit.





Step Five: Seals, Latches and the final product.







