

<https://drive.google.com/file/d/0Bz6GLgv5vSjWdzdXaWUxWlkzbWs/edit?usp=sharing>

Here is the shopping list for the Rocket Stove:

5 inch diameter pipe 1/8 of an inch thick (I found it in 20 foot lengths at Metal Mart in Lehi)

Cut the pipe to 18 ½ inches



Cut the 18 ½ inch pipe in to two pieces 45 degree angle



The short pipe is 11 inches (see above and below)
The long pipe is 12 ½ inches



Weld the two pipes together (See below)



Grind off sharp edges

Use the pipe as a template and draw a circle on some paper/cardstock

Use a sharpie and trace the template on the lid and 1 inch from the bottom of the bucket.

Drill a hole on the inner edge of the circle on the lid and on the bucket large enough to fit the blade of a jigsaw. (Use a blade for cutting metal)

Carefully cut around the inside edge of the circles so that the pipe will have a tight fit. (You may want to practice on some sheet metal or cardboard to get the circle the right size to fit the pipe)



Buckets can be purchased from paint stores in bulk. (Black or Gray)
Put the pipe with the short end into the bucket and through the hole.
Put a rock, brick, cement piece, angle iron, 1 inch high under the pipe in the center of the bucket to hold it up. (something non burnable)

Cover the top hole of the pipe with some cardboard or wood scrap and pour in some perlite to the top of the bucket and shake it to settle the perlite. Use a dowel or stick to pack around the pipe. (One bag of perlite (2cu ft.) will do about 3 stoves

Put the lid on and hammer the tabs down on the sides. (See below)



IC 15WB+

Seal around the pipe with a fire retardant calk. (The calk is more cosmetic because no calk will withstand the high temperatures that will be produced when the stove is functioning properly. That is why a carefully cut hole the right size is so important.)

Cut some 3/8 inch rebar into 2 pieces a foot long and put them in a vice and bend them at the six inch mark. (Use a 1/2 inch pipe three feet long to bend the pipe by

putting the exposed 6 inch rebar inside the pipe to act as leverage while bending to a 90 degree angle)

12 inch long and 4 inch wide sheet steel (I purchased it in 20 foot lengths 4 inches wide from Metal Mart in Lehi, Utah)



Place the 4 inch wide and 12 inch long piece of steel in the bottom pipe. (This is very important to provide a constant air source to the wood at the end of the elbow)

Below shows the gap at the end of the metal plate where combustion takes place.



The two angled bars at the top will hold the pan/pot/Dutch oven (See below)

See the finished product below. (A grate can be purchased from Deseret Industries or a thrift store to put on the top as well though not necessary)



We had problems with older versions of the stove. (see pics. below)

We went with steel pipe and perlite for several reasons.

1. The 5 inch heating pipe will burn through with continual use
2. The fiber glass insulation burns and melts around the pipe (See below)
3. The perlite has a higher melting point. Vermiculite can be used as well (more expensive)

