



Rex W1REX in his custom 'Bandanna Mask'

Heading into the 'COVID-19 war zone' to get some groceries!

The new Maine state mandates for BIG box stores prohibit more than 100 customers in the store at a time. Stores must maintain the social distancing guidelines of at least 6 feet inter-spacing between all customers and employees alike!

Sam's Club is almost an hour from the farm but they have a special 'seniors' time of 7am to 9 am on Tuesdays and Thursdays. I planned to get up early and be #1 in line with all the other seniors who *should* be mindful of their shopping habits during this pandemic. My daughter didn't like my plan and employed me to be extra cautious so I promised I would wear a mask (somehow) and be extra cautious. Here in Maine, masks are unobtainium! Even doctors, nurses, health care workers and first responders have a hard time finding masks. Headlines in this morning's Portland Press Herald indicates that the State of Maine is on it's own as no more PPEs and supplies will be forthcoming as the federal stockpile has been shipped elsewhere...

I did have a good plan. I had researched HEPA filters online and discovered that 3M makes an 99.97% HEPA filter (pretty much

equivalent to the filtration in N95 masks) for a particular vacuum cleaner. I went to my ACE hardware store and found a pack on the hook and another HEPA filter for a small shop vac. I bought both filters and headed into the shop to see what I could make. After all, I have been a maker since before the term was even invented.....



Current state of my bench.....lots of stuff happening all at once!



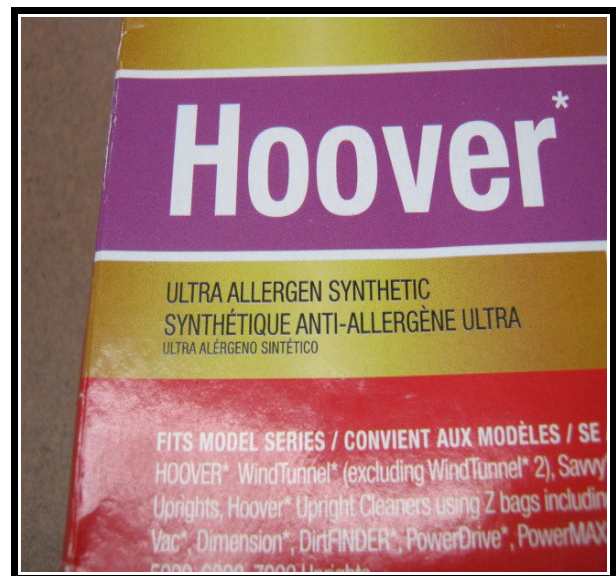
Bench 5 minutes later!

Note that the top of my bench has a 'tray' made from 1/4" Masonite with a small pine lip around the sides & back. I can pick up a current project(s) tray, set it aside and bring in a new clean tray!



My mask making supplies.

Closeup of the vacuum cleaner box show ULTRA ALLEGEN in the description. I found the specs for this filter online and it had pretty much the same filtration specs as the material in the N95 masks.



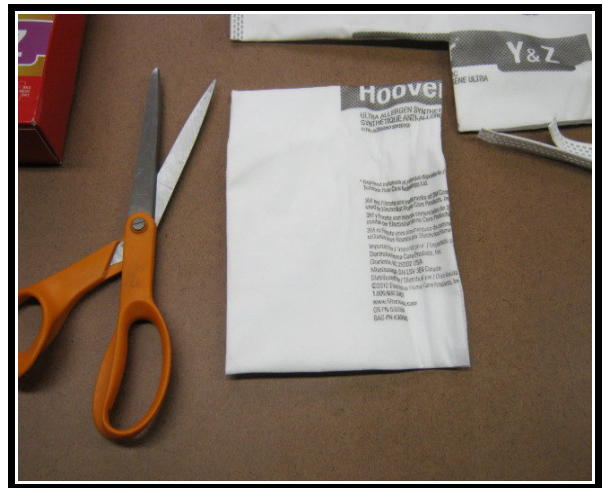
99.97%
on particles above .3 micron

My other purchase was a pack of bandannas. I had the plumbers solder (very thick) and the painter's tape.

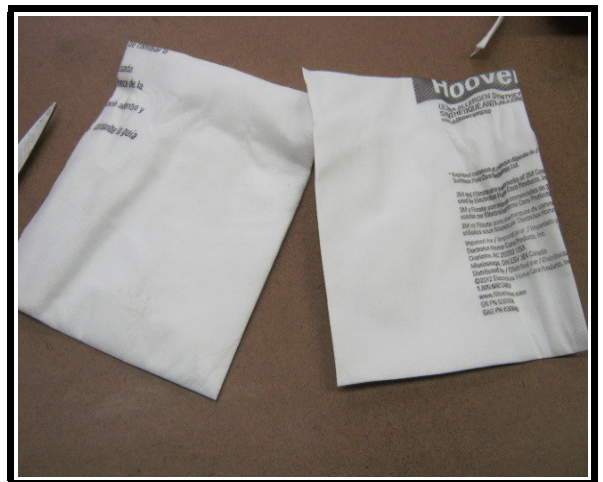
Here is one of the 2 filters that came in the package for about \$8.



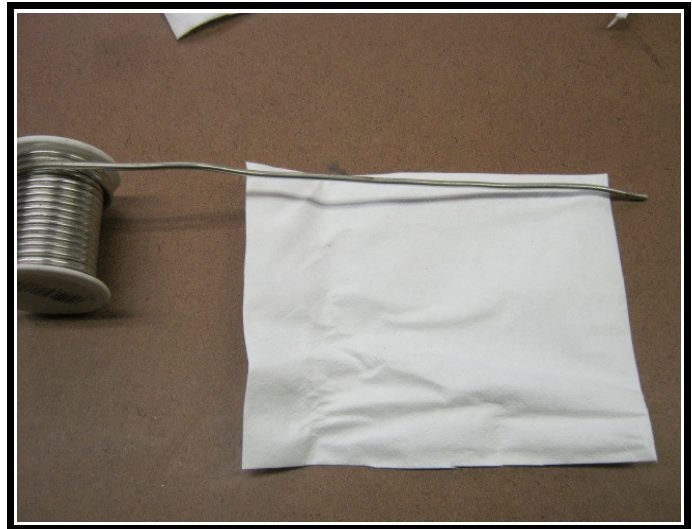
I cut a 'mouthful' of filter from the bag.
I cut completely through the bag...



Which makes filters for 2 masks....



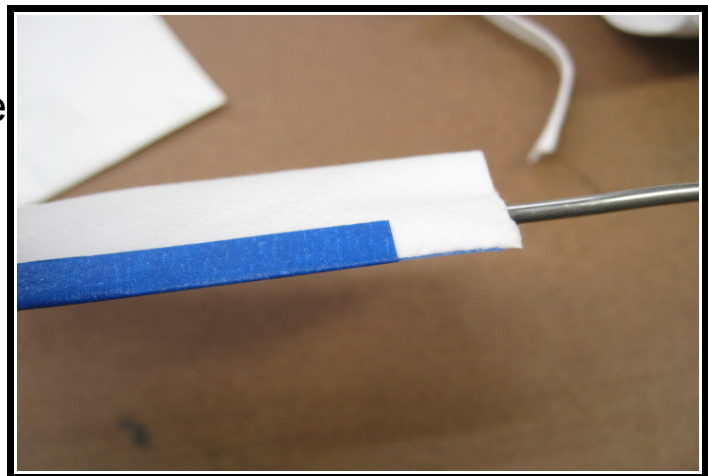
I rolled out some plumbers solder so it went a reasonable distance past the edges of the filter material.



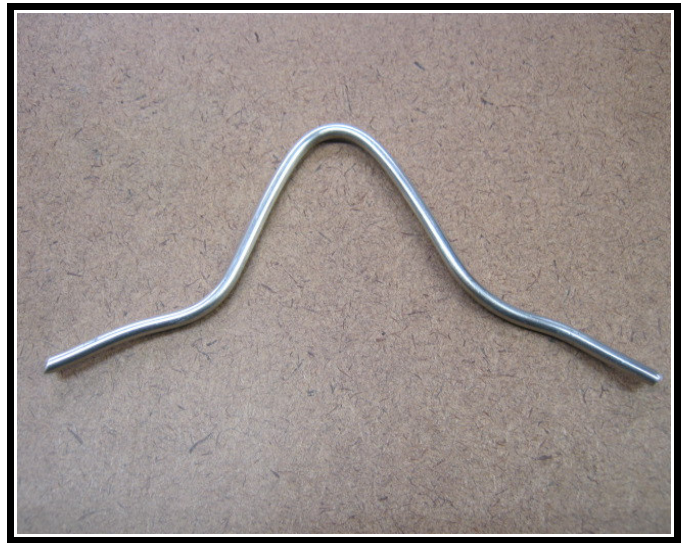
I taped the solder to the filter material just a little down from the top edge. I spaced it so that there was more tape below the solder than above



I put a second strip of tape at the solder and rolled it over the top of the filter.



Later, when you are wearing the mask, you can pinch and bend the solder to conform to your face for a custom face. Pinching the nose 'hard' helps close it off some so it will be more natural to breathe through your mouth...



Place the filter, with the solder side to the pointy end of the folded in half bandanna....



Tape it to the bandanna on a couple of sides with just a minimal overlap.



Fold the top half down.....

(you can still see the filter through the bandanna)



Fold the long top part of the bandanna over again just below the strip of solder.

Now the strip of solder is at the top of the bandanna mask where it can be bent to provide a custom fit to the bridge of your nose and contour of your face!





Pretty effective bandanna mask ready to wear....

Note that the bandanna mask has been flipped over. The loose triangle flap piece will now be close to your face and can then be tucked in to your shirt or jacket for a more closed off air channel. Of course, this bandanna mask is no substitute for a real N95 mask but I sure did feel more comfortable wearing it rather than nothing or a simple bandanna over my nose, and my daughter was happy!!

The only flaw in my plan was that I slept in a little late and got there about 10 minutes into the start of the seniors time. The store was already full and I was #35 in line waiting for people to finish their shopping and come back out. I waited for about 30 minutes in the cold rain before I got a chance to shop! I stocked up with lots of canned goods so I won't have to do it again hopefully for a month!



One hint: just don't go into a bank and try to do a little personal banking while wearing the Bandanna Mask!

BE SAFE OUT THERE!

Rex W1REX

