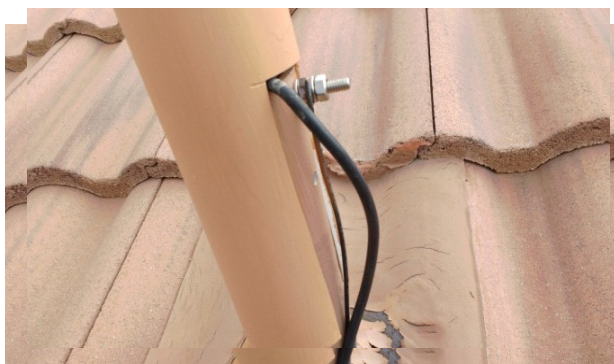


40 METER (OR ANY OTHER BAND) VENT ANTENNA

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If you are plagued by CC&R's like I am, you are always looking for a way to get on HF without the antenna being obvious to the community. I thought up the idea of a vent antenna because I use a Ventanna brand antenna for 220 Mhz. I have been wanting to be able to get on 40 meters at night and thought I would give this idea a try. Problem was finding a small, short antenna that would work.

One day, I was looking at my MFJ catalog and ran across a short version of the popular Hamstick type of antennas made by MFJ. You can choose any band 6 through 75 meters. I chose the MFJ-2340T for 40 meters. These antennas are only 36 inches tall! So, I thought I would give it a try and built my vent antenna to work 40 CW, SSB and FT8. Tune it for any part of the band you wish and use an antenna tuner for the other sections of the band to touch it up. These antennas sell for \$19.95 each.



The mounting bracket you see mounted in the vent pipe came from a typical truck stop store here in town. This one has a 3/8-24 connector on one end and a SO 239 connector on the other. Simply mount the unit in the vent with a nut and bolt as shown above. The coax plugs in the connector as shown. The wire coming off the bolt is a 1/4 wavelength radial. This antenna gives about 100 Khz bandwidth on 40 meters. As mentioned, an antenna tuner will fine tune the rest of the band.

After the antenna is tuned, take a piece of PVC pipe and paint it the same color as the roof. Cut a groove in the pipe so it will slide over the mounting bolt and coax. When installing the pipe, hold it in one hand while you insert the antenna into the pipe and screw it into the mount. Then drop the pipe over the vent and screw it in two places to secure it to the vent.



Above is a picture of the Vent Antenna. At just over 3 feet tall, it does look a little taller than most vents, but I do notice other roof vents that are as tall through out the neighborhood. The picture to the left is a shot from the street. If you look hard, you can see it between the tree and the bush. So far, no body has noticed it and I am betting that no one will. Since putting it up, I have worked all over the country and various European countries on SSB, CW and FT8. Not bad for a 3 foot antenna on 40 meters!