



Apartment-Condo Antennas

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High Density Housing Concerns

- ▶ RFI to the neighbors or yourself
- ▶ Access for installation
 - ▶ Antenna location
 - ▶ Coax pass through
- ▶ Restrictions
- ▶ Grounding

RFI concerns -- QRP operations looks good

- ▶ Computer Speakers
 - ▶ Wind cable through ferrite core
 - ▶ Add filter network in line
- ▶ Bad cable installation
 - ▶ Check all the connectors
- ▶ TV-Radio susceptibility
 - ▶ Inexpensive sets are the worst and tough to fix
- ▶ Appliances
 - ▶ Unattended operation or hanging
 - ▶ Reports of ovens turning on. New appliances with digital controls are susceptible

Basic selection

- ▶ HF Dipoles (can be tacked to ceiling and run in all sorts of designs to get the length needed)
- ▶ Random wires (or 43 ft long wires)
- ▶ VHF-UHF verticals
- ▶ VHF-UHF Beams
- ▶ Shorten HF antennas
- ▶ Stealth antenna
 - ▶ Flag poles HF
 - ▶ Vent pipes VHF-UHF
 - ▶ Strip lines VHF-UHF
- ▶ Loop antennas
- ▶ Slinky are used as helical antennas on HF

VHF-UHF antennas

- ▶ Make the vertical part of a flower pot or decorative structure
 - ▶ Comet GP-6 wrapped with fake garland set on porch was used for over 8 years and no one ever said anything. When asked about the coax he said it was part of the drip irrigation.
- ▶ Mount strip lines (lead or copper tape) on the window
- ▶ Use thin color matched wire
 - ▶ Might not be as durable but easy and cost effective to replace

Opportunistic radiators for HF

- ▶ Look for decorative metallic features on the outside of the building
 - ▶ Aluminum shutters, Gutters, Window trim, Flashing that can not be touched!
 - ▶ Will need a good tuner and willing to experiment
 - ▶ Use a small piece of sand paper and clean the coating off a small spot
 - ▶ Drill for a #8 sheet metal screw
 - ▶ Attach the center of the coax to the feature
 - ▶ Spend a lot of time working with an analyzer and tuner
- ▶ Use # 18 wire or smaller and tuck it under the vinyl siding cut to the correct dipole length.

Stealth VHF-UHF antennas



Portable HF antennas



Typical antenna in the attic



Some other places to look for ideas

- ▶ [The Care and Feeding of a Condo Antenna Farm](#)
QST April 2001, pp. 64-66
- ▶ <https://www.qsl.net/af4ps/iad.html>
- ▶ https://www.rsgbshop.org/acatalog/PDF/StealthAntennas_Sample.pdf