

# Introduction

POWER YOUR RADON FAN

**What's The problem here?**



**This one? NEC 400.12**



How about this one? Nec 334.12.b.4



# What Does the N.E.C say about 1/8hp Motors

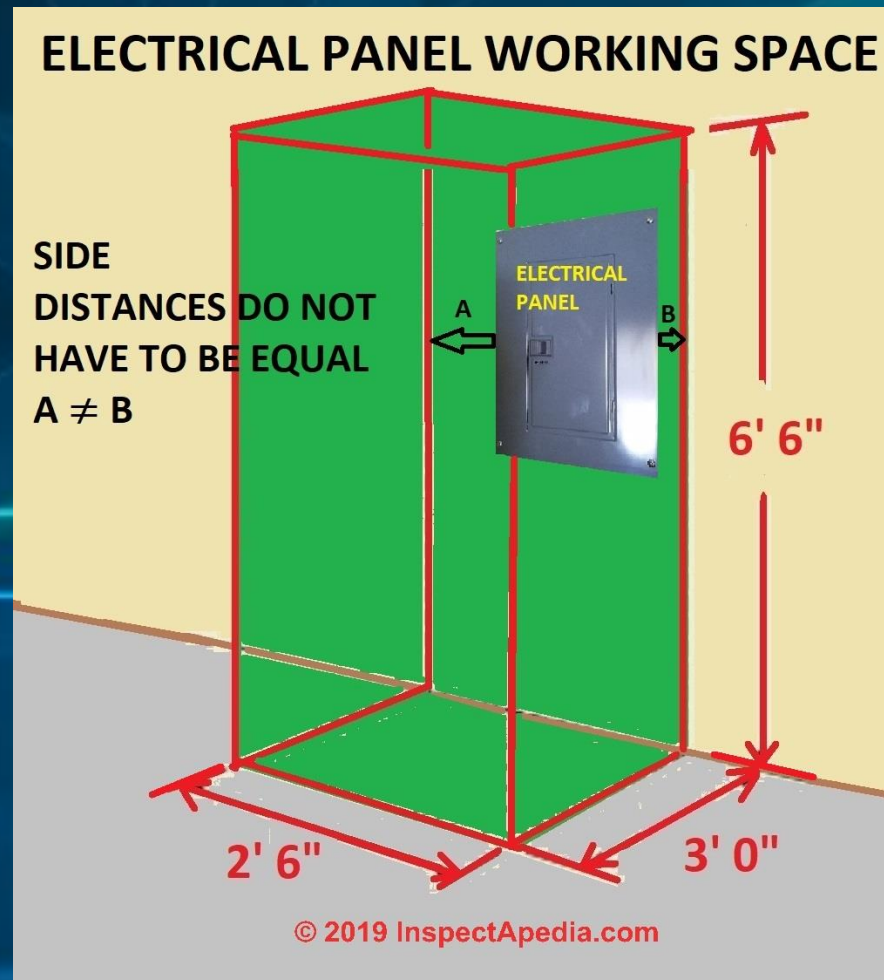
- N.E.C 430-109b
  - Stationary Motors of 1/8 hp or less
    - The breaker Can act as a disconnect, But Radon protocol says what??

# Type of wire use.

- Type NM?? (Romex) Not unless you live in North Carolina. NO Romex outside period since 2008.
- Probably Wired in Romex no switch
- Even though it is sleeved it is not legal to use Romex **outside**. This brings up a bunch of different issues. Not enough time on this session to discuss see my after the session.



# Placing Floor penetrations



# Sizing Wire for Safety

- Wire size is probably the most important thing you will be faced with. There are times where you are very limited to circuitry and it can be even challenging at times. If your finding the only circuit available is 20 amps be sure to use 12 wire not 14. Always match your wire size properly #12 for 20 amp line #14 for 15 amp line.



# Wiring Methods in buildings of gathering

- Churches, meeting houses, restaurants any building which has over 100 people at once.
- Must use wire rated for such:
- MC cable
- Pipe
- Greenfeild

## Places Where physical damage can take place

- Wiring where you can have physical damage such as basement walls Garages things of that nature.
- Either use a wood strip (for Basements) or install your wiring in conduit.
- I'm sure y'all carry pipe benders in your truck
- NEC 334.15.b





I'm sure this was my Competitors after they left the estimate



# Low Voltage Fans Pro's

- No Permit for Electrical work
- Easy to wire

# Low Voltage Fans Con's

- There need's to be at least one receptacle within the drivers reach.
- Very expensive if your bidding to be complete
- Wiring distance
- Not a whole lot of options for fans at this time.
- Fear of not being able to replace it someday (discontinued)

# Permits for electrical work

- Some HOA's and townships in PA now require an electrical permit.
- What do you do?
- How much will it cost?



**Romex outside, No Romex connector,  
No Ground screw to the box**



**Completely rusted out, filled with water, if  
your drilling your own hole in the top use a  
Meyers hub**



**Water and electric Yikes. The ground is the most important part of any circuit**



Sometimes its not water leaking in its  
condensation



Thank you for you time  
And Don't be this guy

