

Address: \_\_\_\_\_ Permit #: \_\_\_\_\_ Date: \_\_\_\_\_

**ELECTRICAL ROUGH INSPECTION CHECKLIST**

**Conduit:**

YES	NO	N/A	
___	___	___	1. Per NEC 2014 Article 300 Galvanized or IMC Conduit.
___	___	___	2. Neutrals and grounds must be separated in subpanels.
___	___	___	3. Exposed type NM "Romex"
___	___	___	4. Minimum wire size is #12 for kitchen, laundry & bathroom circuits.
___	___	___	5. #14 for other branch circuit wiring.
___	___	___	6. Minimum range wire size is 8/3 with ground. Minimum range circuit size is 40 amps.
___	___	___	7. Double oven or cooktop circuit and wire size shall be per manufacturer's specifications. Minimum 10/3 – 30 amp (4 wire).
___	___	___	8. Water heater minimum wire size is 10/2 with ground for 4kw and greater.
___	___	___	9. Minimum dryer wire size is 10/3 with ground (4 wire).
___	___	___	10. Air handlers must be marked with heater KW <ul style="list-style-type: none"> <li>a. 5 KW – 10/2 with ground</li> <li>b. 7.5KW – 8/2 with ground</li> <li>c. 10KW – 6/2 with ground</li> </ul>
___	___	___	11. All grounding connections must be made up with approved splice caps or wire nuts and have Pigtail for connection to the device.
___	___	___	12. All switches and receptacles grounded.
___	___	___	13. All white wire used as a hot conductor must be marked with tape other than white or green. (switch loops, travelers or 240 Volt circuit, etc.).
___	___	___	14. Neutrals must be marked with white and grounding conductors must be marked with green If #6 or larger.

**Circuits/Outlets:**

___	___	___	1. #12/2 with ground wire (20-amp circuit) must be used for the 2 or more-kitchen small appliance Circuits. These circuits shall extend from the kitchen countertop and island area to the Dining, nook and breakfast area.
___	___	___	2. A refrigerator may be on the small appliance circuit. If a separate refrigerator circuit is supplied, it May be a 15 Amp circuit with 14/2 with ground wire.
___	___	___	3. Countertop and island receptacles must be GFCI protected.
___	___	___	4. Rangehood is <b><u>NOT</u></b> permitted to be on a small appliance circuit. Igniter for gas range <b><u>is</u></b> permitted To be on a small appliance circuit.
___	___	___	5. At least one 20-amp branch circuit shall be provided to supply all bathroom receptacles. Where the 20-amp circuit supplies a single bathroom, lighting and other equipment within the same bathroom May be on the same circuit.

- \_\_\_ \_\_\_ \_\_\_ 6. All required garage and exterior receptacles on a 15 or 20 amp. Circuit shall be GFCI protected.
- \_\_\_ \_\_\_ \_\_\_ 7. Laundry circuit must be a 20 amp.
- \_\_\_ \_\_\_ \_\_\_ 8. Dishwashers and disposals must be wired on individual circuits if on 15-amp circuit.
- \_\_\_ \_\_\_ \_\_\_ 9. Air handlers located in attics must have a light and receptacle at or near the unit for servicing unit.
- \_\_\_ \_\_\_ \_\_\_ 10. A receptacle is required within 25' and on the same level as the condenser.
- \_\_\_ \_\_\_ \_\_\_ 11. Attic space used for storage must have a switched light at the attic access.
- \_\_\_ \_\_\_ \_\_\_ 12. Multi-wire branch circuits must have neutral connections independent of the device. They must  
Be wire nuted together with a pigtail to the device.
- \_\_\_ \_\_\_ \_\_\_ 13. All 120 Volt, 15-20-amp branch circuits in kitchens, family rooms, dining rooms, living rooms, parlors,  
Libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, or  
Similar rooms or areas shall be AFC protected.
- \_\_\_ \_\_\_ \_\_\_ 14. Smoke detectors must be wired together with battery backup and located in and adjacent to sleeping  
Rooms.
- \_\_\_ \_\_\_ \_\_\_ 15. Smoke detector circuits shall not be connected to a GFCI or AFCI breaker.
- \_\_\_ \_\_\_ \_\_\_ 16. Voltage drop must be considered for all circuits.
- \_\_\_ \_\_\_ \_\_\_ 17. Receptacle spacing maximum of 6' from any point on the wall. A receptacle is required on a 2'  
Or longer wall space. Note: a receptacle controlled by a wall switch does not count as a required  
Outlet.
- \_\_\_ \_\_\_ \_\_\_ 18. Kitchen countertops must have receptacles spaced not more than 24" from any point measured along  
The backsplash. A countertop  $\geq 1'$  in width requires a receptacle. Receptacles must be above  
But not more than 20" above countertop.
- \_\_\_ \_\_\_ \_\_\_ 19. Island and peninsular cabinets must have a minimum of 1 GFCI protected receptacle.
- \_\_\_ \_\_\_ \_\_\_ 20. The outward face of an island is classified as wall and a wall (not countertop) receptacle outlet is  
Required.
- \_\_\_ \_\_\_ \_\_\_ 21. Bathroom countertop receptacles must be within 2' of the outside edge of the lavatory.
- \_\_\_ \_\_\_ \_\_\_ 22. Whirlpool and hydro massage tubs must be on a separate circuit and protected by a readily accessible  
GFI.
- \_\_\_ \_\_\_ \_\_\_ 23. The number of circuits supplying general lighting and convenience outlets shall be computed by the  
Living area X3 watts per sq. foot divided by 120 volts. Example 1800 sq. foot living area X3  
+5400. 5400 divided by 120=45 AMPS. Thus 3-25 amp. Circuits evenly proportioned may  
Supply all lighting and receptacles except kitchen, dining, nook, laundry and bathroom receptacles.

**Enclosures:**

- \_\_\_ \_\_\_ \_\_\_ 1. All panels must be approved for location and use.
- \_\_\_ \_\_\_ \_\_\_ 2. No panels with overcurrent devices permitted in bathrooms, clothes closets or over stairways.
- \_\_\_ \_\_\_ \_\_\_ 3. Working clearance for electrical panels must be a minimum of 30" wide X 36" deep X 72" high in  
Front of panels. No other equipment may be in this space.
- \_\_\_ \_\_\_ \_\_\_ 4. A clear path must be provided to the electrical panel.
- \_\_\_ \_\_\_ \_\_\_ 5. Conduit must be bushed and sealed at top end.

**Boxes/Fittings:**

- \_\_\_ \_\_\_ \_\_\_ 1. Boxes must be properly supported.
- \_\_\_ \_\_\_ \_\_\_ 2. Junction boxes must be accessible. Nail plates must be installed to protect wires as necessary.
- \_\_\_ \_\_\_ \_\_\_ 3. Box fill count of #14 wire is 2.0 and for #12 wire is 2.25 per conductor with grounding wires  
Collectively counting as 1. The device counts as 2.

- \_\_\_ \_\_\_ \_\_\_ 4. All metal boxes must be grounded with a green screw or grounding clip and be identifiable.
- \_\_\_ \_\_\_ \_\_\_ 5. All ceiling fan boxes listed for ceiling fans.
- \_\_\_ \_\_\_ \_\_\_ 6. Wires secured within 12" of box, then every 4-1/2".
- \_\_\_ \_\_\_ \_\_\_ 7. Approved standoff brackets on Type NM "Romex" wires attached to furring strips.
- \_\_\_ \_\_\_ \_\_\_ 8. Ground clamps used outdoors & buried in concrete or ground must be direct burial type with brass screws
- \_\_\_ \_\_\_ \_\_\_ 9. All recessed cans must be thermally protected. Only type 1C may be in direct contact with insulation

**Switches:**

- \_\_\_ \_\_\_ \_\_\_ 1. Disconnect at A/C air handler
- \_\_\_ \_\_\_ \_\_\_ 2. Disconnect within sight of a a/c condensing unit.
- \_\_\_ \_\_\_ \_\_\_ 3. Disconnect within sight of all motors.
- \_\_\_ \_\_\_ \_\_\_ 4. Wire sized according to breaker size.

**Services:**

- \_\_\_ \_\_\_ \_\_\_ 1. 100 AMP 3 wire minimum service on all residential including mobile homes.
- \_\_\_ \_\_\_ \_\_\_ 2. Must have minimum service drop clearance
- \_\_\_ \_\_\_ \_\_\_ 3. Riser more than 5' above roof must be guyed.
- \_\_\_ \_\_\_ \_\_\_ 4. Galvanized conduit must be used through roof.
- \_\_\_ \_\_\_ \_\_\_ 5. Minimum of 2 bolts through wall to support riser.
- \_\_\_ \_\_\_ \_\_\_ 6. Bonding bushing must be used on metal nipples and conduits if the largest concentric or eccentric Knockout has not been used.
- \_\_\_ \_\_\_ \_\_\_ 7. Conduit termination must protect wires.
- \_\_\_ \_\_\_ \_\_\_ 8. Protection from damage must be provided when PVC, seal tight, ENT or SEU cables are used for Service entrance conductors.
- \_\_\_ \_\_\_ \_\_\_ 9. Fittings installed in wet locations such as outside panels and meters must be weatherproof.
- \_\_\_ \_\_\_ \_\_\_ 10. Readily access to service disconnecting means, either outside or inside nearest the point of entrance.
- \_\_\_ \_\_\_ \_\_\_ 11. Meter and main disconnects must be grouped in one location (except for townhouses).
- \_\_\_ \_\_\_ \_\_\_ 12. Service panel may not be located in bathrooms or over stairways.
- \_\_\_ \_\_\_ \_\_\_ 13. Outbuildings or garage feed from the house service must have a grounding electrode system (same as for house). No more than 6 mains or breakers servicing as mains without a single Mains without a having a single main disconnect.
- \_\_\_ \_\_\_ \_\_\_ 14. Electric service feeder size.
  - a. 200 AMP – 2/0 copper or 4/0 aluminum
  - b. 150 AMP - #1 copper or 2/- aluminum
  - c. 100 AMP - #4 copper or #2 aluminum
 NEUTRAL may be reduced by 2 wire sizes.

SER cable may be used between main panel and subpanel if protected from physical damage  
And proper fittings are used.

- \_\_\_ \_\_\_ \_\_\_ 15. Minimum grounding wire size.
  - a. 200 AMP - #4 copper
  - b. 150 AMP or less - #6 copper

- \_\_\_ \_\_\_ \_\_\_ 16. Grounding electrode system must include footer steel and be bonded together with ground rod and Metal water pipe (if used). If footer ground is not available, 3 ground rods must be used.
- \_\_\_ \_\_\_ \_\_\_ 17. Bonding termination for communications, radio and tv, NPBCS shall be in proper terminal block at Service.
- \_\_\_ \_\_\_ \_\_\_ 18. Antioxidant on all aluminum connections (manufacturer recommendations).
- \_\_\_ \_\_\_ \_\_\_ 19. Conductors exposed to sunlight shall be listed sunlight resistant.
- \_\_\_ \_\_\_ \_\_\_ 20. Return plans to original location, sign and date permit card, leave reject if necessary or courtesy note If you need to convey a message.

THESE GUIDELINES ARE NOT ALL INCLUSIVE. ADDITIONAL REQUIREMENTS IN THE FLORIDA BUILDING CODE MAY ALSO APPLY TO YOUR PROJECT. IF YOU NEED FURTHER ASSISTANCE, PLEASE CONSULT THE CURRENT BUILDING CODE. IF YOU HAVE ANY FURTHER QUESTIONS, PLEASE CONTACT THE CITY OF INVERNESS COMMUNITY DEVELOPMENT DEPARTMENT AT 352-726-3401 OR [DDS@INVERNESS.GOV](mailto:DDS@INVERNESS.GOV).