### **Home Electrical Inspection Checklist**

### \$1000 for Houses 2500 Sq Ft and Under

### \$1500 for Houses over 2500 Sq Ft

- 1. Check wiring methods (usually cable assemblies) for support and suitability for the conditions.
- 2. Check recessed luminaires for clearances from combustibles and insulation.
- 3. Check spacing of receptacles for walls and countertops, including islands and peninsulas.
- 4. Verify that a minimum of two 20-ampere small-appliance branch circuits are used for kitchen receptacles.
- 5. Verify that properly sized circuits have been provided for specific kitchen appliances, such as dishwashers, disposals, ranges, cooktops, trash compactors, and the like.
- 6. Check for additional small-appliance branch circuits where there is more than one kitchen.
- 7. Check for other outlets or appliances on small-appliance branch circuits.
- 8. Verify that receptacle outlets are installed adjacent to and within 36 in. (900 mm) of each basin.
- 9. Check for at least one wall switch-controlled (or automatic-, remote-, or centrally controlled) lighting outlet in each hallway, stairway, or foyer.
- 10. Verify that hallways that are continuous for 10 ft (3.0 m) or more have at least one receptacle outlet.
- 11. Verify that foyers that are not part of a hallway have receptacle outlets installed as required.
- 12. Verify that wall switches are provided at each floor level where there are six or more steps between levels.
- 13. Check clearances between luminaires and storage spaces if luminaires are installed in closets. (NEC 410.16)
- 14. Verify that at least one receptacle outlet is installed for the laundry. Verify that this receptacle has GFCI protection.
- 15. Verify that a dedicated 20-ampere circuit supplies the laundry outlet(s) and no other outlets.
- 16. Check for a laundry receptacle outlet within 6 ft (1.8 m) of the intended appliance location.
- 17. Check for proper branch-circuit conductors, including equipment grounding conductors, for 240-volt dryers (if used).
- 18. Verify that at least one receptacle outlet is provided in unfinished basement areas in addition to any receptacles installed for laundry equipment or other specific equipment.

- 19. Verify that a receptacle outlet is provided for servicing mechanical equipment, if any.
- 20. Verify that a receptacle outlet is provided for servicing electrical distribution equipment.
- 21. Verify that a wall switch-controlled lighting outlet or a lighting outlet containing a switch is provided at the entrance to areas for storage or equipment requiring servicing.
- 22. Check basements, accessible attics, attic entrances, and scuttle holes for clearances from or protection of cable assemblies.
- 23. Verify that at least one receptacle outlet is provided in any garage or accessory building. Verify that if installed, branch circuit(s) supplying outlets for electric vehicle supply equipment (EVSE) do not supply any other loads.
- 24. Check for at least two outdoor receptacle outlets, one each at the front and back of a dwelling.
- 25. Check for receptacle outlets on balconies, decks, and porches.
- 26. Check for wall switch-controlled (or remote-, central-, or automatic-controlled) exterior lighting outlets at outdoor entrances or exits with grade-level access.
- 27. Review the calculation of service load and determine the minimum size of service conductors. This will be sent with the follow-up report.
- 28. Verify that service disconnects are grouped together, with no more than six in any one location. New installations under 2023 code require one disconnecting means.
- 29. Check for proper accessibility, working clearances, and dedicated spaces around service equipment.
- 30. Check service-entrance wiring methods for suitability, support, and protection from damage.
- 31. Check for a proper drip loop and weatherhead on overhead services.
- 32. Verify that the point of attachment for overhead service is adequate and will provide required support and clearances above roofs and grade.
- 33. Check service masts for adequate strength and support.
- 34. Check for proper clearances of service conductors from building openings.
- 35. Determine which grounding electrodes are available and verify that they are bonded together to form a grounding electrode system. Ufer? Water main? Building Steel? At least two ground rods?
- 36. Check grounding electrode conductor(s) and bonding jumpers for proper sizing.
- 37. Check grounding electrode connections for proper type, protection, and accessibility.
- 38. Verify that the main bonding jumper is installed and is of the proper size and type.
- 39. Verify that metal interior piping systems are bonded, that bonding jumpers are properly sized, and that continuity around removable devices is assured. Before and after main shut off valve?
- 40. Verify that service raceways and enclosures are properly grounded and bonded.
- 41. Verify that an intersystem bonding termination has been provided.

- 42. Review the calculation of feeder loads and verify that conductors are properly sized and rated.
- 43. Verify that the home has a TVSS or surge suppressor for the system.
- 44. Check for proper accessibility, working clearances, and dedicated spaces around panelboards.
- 45. Verify that at least the minimum number of overcurrent devices and circuits has been provided.
- 46. Verify that the grounded feeder conductors are insulated and isolated from equipment grounding conductors and grounded enclosures.
- 47. Verify that panelboards are grounded by an appropriate and properly sized equipment grounding conductor (or conductors).
- 48. Check positioning of boxes intended to be flush with combustible and noncombustible finished surfaces.
- 49. Check for proper positioning of receptacles and faceplates on walls.
- 50. Check for gaps around outlet boxes in walls.
- 51. Check polarity of devices.
- 52. Verify that device ratings are compatible with circuit and equipment ratings.
- 53. Check for bushings or equivalent protection for cables entering boxes and other enclosures that are exposed.
- 54. Verify that unused openings in boxes and other enclosures are closed that are exposed.
- 55. Check for disconnecting means on both permanently connected and cord-and-plug-connected appliances.
- 56. Verify that circuits for mechanical equipment have correct conductor size and overcurrent protection.
- 57. Check for AFCI protection on all 120-volt, 15- and 20- ampere branch circuits serving outlets in all areas and that AFCI devices are readily accessible.
- 58. Check for tamper-resistant receptacles in all areas where 25- volt, 15- and 20-ampere receptacle outlets are required.
- 59. Verify that all 125-volt, 15- and 20-ampere receptacles serving countertops, all receptacles within 6 ft (1.8 m) of a kitchen sink, and outlets for dishwashers are provided with GFCI protection. Verify that GFCI protection devices are readily accessible.
- 60. Verify that refrigeration equipment is supplied by a small appliance branch circuit or an individual branch circuit.
- 61. Verify that a wall-switched lighting outlet is provided and wired on a general lighting circuit, for each room.
- 62. Verify that properly sized circuits are provided for specific kitchen appliances, such as dishwashers, disposals, ranges (cooktops), trash compactors, and the like.
- 63. Check for proper type, length, and use of flexible cords for appliance connections.
- 64. Verify that bathroom receptacles are supplied by dedicated 20-ampere branch circuits.

- 65. Verify that receptacle outlets are installed adjacent to and within 36 in. (900 mm) of each bathroom basin.
- 66. Verify that bathroom receptacles are GFCI-protected and the GFCI device is readily accessible.
- 67. Check for proper receptacle ratings based on branch-circuit ratings, including receptacles for electric dryers (if used).
- 68. Verify GFCI protection for all 125-volt, 15- and 20-ampere receptacles installed in laundry areas and that the GFCI protection device(s) is readily accessible.
- 69. Verify that GFCI protection is provided for receptacles in basements and that the GFCI protection device is readily accessible.
- 70. Verify that individual branch circuits are supplied for central heating equipment, if any.
- 71. Verify that a wall switch-controlled lighting outlet or a lighting outlet containing a switch is provided at the entrance to equipment requiring servicing.
- 72. Check basements, accessible attics, attic entrances, and scuttle holes for clearances from or protection of cable assemblies.
- 73. Verify that at least one garage receptacle outlet is provided per vehicle bay and that the circuit supplying the receptacle outlet(s) does not supply outlets outside of the garage.
- 74. Verify that GFCI protection is provided for all 125-volt, 15- and 20-ampere receptacles in the garage and that GFCI protection device(s) is readily accessible.
- 75. Verify that a wall switch-controlled lighting outlet is provided in the garage.
- 76. Verify that outdoor receptacles are GFCI-protected unless they are not readily accessible and are supplied by circuits for deicing or snow-melting equipment. Verify that GFCI protection device(s) is readily accessible.
- 77. Check for wall switch-controlled (or remote-, central-, or automatic-controlled) exterior lighting outlets at outdoor entrances or exits with grade-level access.
- 78. Check for GFCI-protected receptacle outlets on balconies, decks, and porches.
- 79. Check overcurrent devices for compatibility with conductors (terminals, ratings, and ampacities).
- 80. Check for proper identification of all overcurrent devices and disconnects.
- 81. Check for open spaces in panelboard fronts or cabinets.
- 82. Verify that doorbell and other Class 2 wiring and transformers are located in appropriate places (not in service equipment or panelboards).
- 83. Verify that any backfed overcurrent devices are secured in place. (NEC 408.36(D) examples are generators and solar panels)
- 84. Check for an intersystem grounding termination at the service equipment.

# **Mobile/Manufactured Homes**

1. Determine whether the unit is a mobile or manufactured home.

- 2. Verify that the mobile/manufactured home supply system is rated 120/240 volts nominal, single-phase.
- 3. Review the mobile/manufactured home park load calculations, and verify that demand factors, if used, have been properly applied.
- 4. Verify that mobile/manufactured home service is rated not less than 100 amperes.
- 5. Verify location and minimum mounting height of mobile/ manufactured home service equipment.
- 6. Verify that a means to supply other structures or electrical equipment has been provided within the mobile/manufactured home service equipment. (NEC 550.32(D)
- 7. Check for GFCI protection on all 125-volt, 15- and 20-ampere receptacles that are installed in addition to receptacles installed as part of the permanent mobile or manufactured home wiring. Verify that GFCI protection device(s) for "field-installed" receptacles is readily accessible. This code requirement states that all receptacles required to be GFCI protected by 210.8(A) and 550.32(E) shall be regardless if they were factory or field installed.
- 8. Verify that the feeder to the mobile/manufactured home has four insulated color-coded conductors. (NEC 550.33(A)
- 9. Verify that feeders installed at mobile/manufactured home lots have a minimum capacity of 100 amperes at 120/240 volts.
- 10. Verify that new electrical installations that are added to existing mobile/manufactured homes comply with applicable requirements of Article 550.

# **Energy Efficiency Recommendations**

- 1. LED lighting. Are all lights using LED lighting? If not, recommend upgrading to LED lighting.
- 2. Is the home using programmable thermostats? We recommend the Google Nest Learning Thermostat, Amazon Smart Thermostat, or the Ecobee Smart Thermostat Premium. We recommend Mysa Smart Thermostat for baseboard heaters with inline thermostats.
- 3. Does the home use all energy saving appliances? We recommend upgrading to energy saving models when you update your appliances for lower utility bills.
- 4. Make sure you are subscribed to our monthly newsletter for more tips and resources to better understand your electrical system and for safe electrical usage habits.