

APPLICATION FOR HOME OWNER PERMITS

Who is eligible?

Permit applications can be applied for by owners of Single Family Dwellings who reside on the property and intend to do the wiring themselves.

The homeowner should have some basic knowledge of electrical wiring. The inspector SHALL give a written test to determine the Home Owner's basic knowledge of electrical wiring.

The Electrical Inspection Section recommends that Home Owners without this knowledge hire a Qualified Electrical Contractor, who will then be responsible for obtaining the Electrical Permit.

Permits cannot be issued for the following Reasons:

1. Proof of ownership is not presented.
2. Repairing or building home for resale or rental purposes.
3. Due to the hazards involved, Home Owners who are not certified electricians, cannot do the following electrical work:
 - a. Swimming pools (portable and non-portable).
 - b. Therapeutic Pools or tubs.
 - c. Hot Tubs.
 - d. Aluminum wiring.

The permit expires in one year from date of issue. The minimum fee is non-refundable, non-transferable and entitles the permit holder up to two inspections. Where more than two inspections are required, an additional Inspector's fee will be necessary.

HOMEOWNERS INSTRUCTION

When to notify for inspections:

1. Rough wiring is complete. This inspection requires:
 - a. All the wiring to be installed and secured.
 - b. All outlet boxes secured in place (flush with finished walls and ceiling).
 - c. All grounding conductors terminated (in outlet boxes).
 - d. All wiring installed in outlet boxes and splices completed.

CAUTION

DO NOT make connection into electrical panel and

DO NOT energize.

DO NOT conceal wiring. The inspector cannot approve what he cannot see.

2. Correction

This requires all defects noted by the inspector to be completed.

3. Final inspection

- a. All devices connected and secured to outlet boxes.
- b. All branch circuits connected at the panel.

CAUTION

BEFORE entering the electrical panel, make sure the main switch is in the "OFF" position.

PERMIT NUMBER, ADDRESS, and the TYPE of inspection must be given at the time of notification.

ACCESS to the premises is to be arranged for the day following notification.

The day of inspection is normally the working day following notification.

GUIDE FOR HOMEOWNER WIRING

The Electrical Inspector may cancel the Home Owner's Permit if, at his discretion, the installation could be hazardous to life and/or property.

A permit from a Qualified Electrical Contractor will then be required to complete the electrical installation.

General rules for non-metallic sheathed cables:

1. Only copper conductors are to be used.
2. Wire size for general-purpose wiring-lighting receptacles - # 14 copper.
3. Wires run to lights shall be rated for 90 degrees Celsius.
4. Overcurrent protection for general purpose wiring – lighting and receptacles – 15 amperes
5. The cable shall be run in continuous lengths between outlet boxes, junction boxes, and panel boxes as a loop system and the joints, splices and taps shall be made in the boxes.
6. Where wires pass through holes in joists or studs, the holes must be bored 32mm (1 ¼”) back of the face of the stud or joist or protected from driven nails by metal plates.
7. Wires are to be secured every 1.5 m (5 feet) when run on the sides of joists or studs and secured 300 mm (1 foot) from each outlet.
8. Wires, where exposed within 1.5m (5 feet) of the floor are to be protected.
9. Cables are to be kept a minimum of 25 mm (1 inch) from heat ducts or pipes.
10. Where cables are run through or along metallic studs, joists, sheathing, or cladding, it shall be:
 - a. So located as to be effectively protected from mechanical injury both during and after installation
 - b. Protected where it passes through a member by an approved insert of insulation material adequately secured to the opening in the member; and
 - c. Supported where it runs along or parallel to a member by an approved support of insulating material to ensure isolation from the metal.
11. Where the cable is installed immediately behind a baseboard, it shall be effectively protected from mechanical injury by driven nails.

OUTLET BOXES

12. Boxes to be set flush with the finished wall or ceiling and secured solidly to studs or joists.
13. All outlet boxes are to be grounded. See attached drawings.
14. All junction boxes shall be accessible after installation.

15. At least 150 mm (6 inches) of wire must be extended out of each outlet box for joists and other connection of equipment.

COMMON TYPES	DIMENSIONS	#14	GENERAL USAGE
Octagonal	4 x 1 ½"	10	Light or junction
Square	4 x 1 ½"	14	Junction
# 1103	3 x 2 x 1 ½"	5	Switch or plug
# 1102	3 x 2 x 2	6	Switch or plug
# 1104	3 x 2 x 2 ½"	8	Switch or plug
# 1104	3 x 2 x 3	10	Switch or plug

NOTE: When a dimmer switch is used in a switch outlet box, reduce the number of permitted conductors by 3.

16. Maximum number of conductors permitted in boxes:
 2 -14 non-metallic sheath cable = 2 # 14 conductors
 3-14 non-metallic sheath cable = 3 # 14 conductor

LIGHT FIXTURES

17. Light fixtures are to be connected so that the white wire of the fixture is to the white wire of the circuit.
 18. Recessed fixtures – as per attached drawing.

SMOKE ALARMS

19. Smoke alarms are required to be installed in all sleeping areas of new construction. These alarms are normally installed in the hallway ceiling by the bedroom doors. They can be connected to a general purpose circuit if a fire alarm circuit is not available. **Note:** Only wired-in smoke alarms are permitted.

GARAGES

20. Underground service to a garage – as per attached drawing.
 21. At least one duplex receptacle is required. One duplex receptacle is required for each car space. The lighting may come off this circuit.

ELECTRIC DRYER

22. Circuit breaker size 30 Amp. 2 pole common trip.
 23. Wire size # 10 copper (NMD-90)
 24. Receptacle 30 Amp. 125/250 Volt (14-30R)
 25. Flexible dryer cable rated – 30 Amp.

ELECTRIC RANGE

26. Circuit breaker size – 40 Amp. 2 pole common trip.
 27. Wire size # 8 copper (NMD-90).
 28. Receptacle – 50 Amp. 125/250 Volt (14-50R).

29. Flexible range cable rated – 40 Amp.

RECEPTACLES

30. A duplex receptacle shall be installed in the walls of every finished room or area so that no point along the floor line of any usable wall space is more than 1.8 m (6 feet) horizontally from a receptacle. The usable wall space shall include a wall space 900 mm. (3 FEET) or more in width but shall not include doorways, areas occupied by a door when fully opened, windows which extend to the floor, fireplaces or other permanent installations that would limit the use of the wall space.

31. All receptacles are to be grounded – see attached drawing.

32. Receptacles shall be connected that:

- a. Silver contact of receptacle is to be connected to white circuit wire.
- b. Only one wire under terminal screw.

33. Refrigerator requires a duplex receptacle on a separate circuit.

KITCHEN COUNTERS

34. A sufficient number of split receptacles along the wall behind counter work surfaces so that no point along the wall line is more than 900 mm (3 feet) from a receptacle measured horizontally along the wall line. Sinks, built in equipment and isolated work surfaces less than 300 mm (1 foot) long at the wall line may be excluded from this requirement.

Where two or more split receptacles are required, a minimum of 2 – 3 wire circuits shall be installed and these shall not be connected to other receptacles or fixtures.

DINING AREA FORMING PART OF A KITCHEN

35. Requires at least 1 receptacle on a separate circuit.

LAUNDRY ROOM AND/OR UTILITY ROOM OR AREAS

36. Requires at least one receptacle on a separate circuit in each area.

WASH BASIN

37. Requires one duplex receptacle protected by a “ Ground Fault Circuit Interrupter” adjacent to each basin.

BATHROOM AND SHOWER

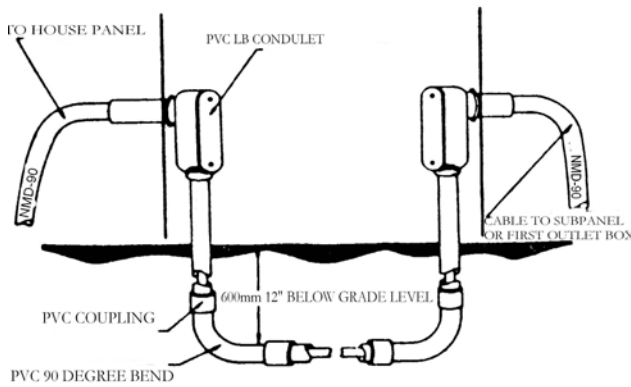
38. Requires a duplex receptacle protected by a “ Ground Fault Circuit Interrupter.” Receptacles shall be located as far as practicable from the bathtub or shower stall with a minimum distance of 1 m (3.25 feet).

OUTDOORS

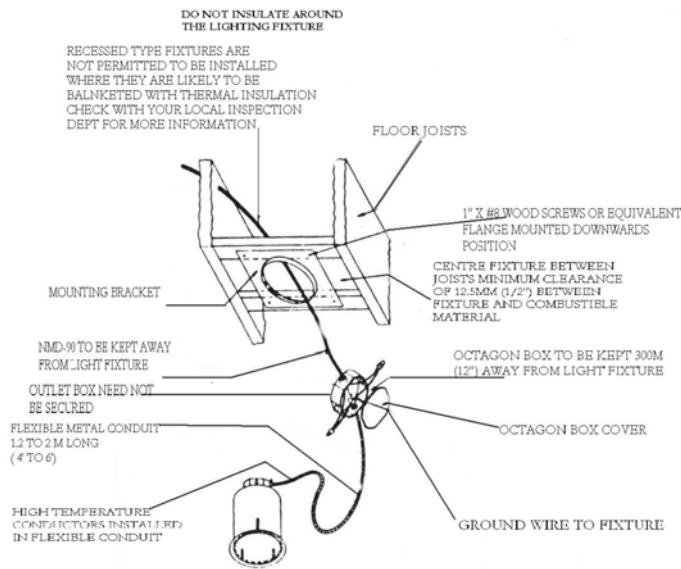
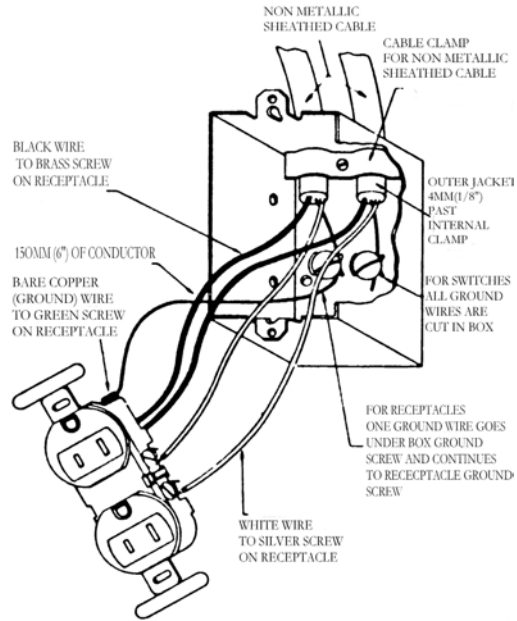
39. Requires at least one receptacle on a separate circuit. All receptacles located on the dwelling including attached carport and attached garages are to be protected by a “Ground Fault Circuit Interrupter.”(GFCI)

NOTE: When designing the basement or renovating existing areas, panelboards shall NOT be located in closets, bathrooms or similar type areas.

Breaker Size (House)	Type of Circuit (Garage)	Size of Cable	Size of Conduit and Fittings
15 Amps 1 Pole	Single circuit	2 #14 NMD-90	3/4" PVC
15 Amps 2 Pole	Double circuit	3 # 14 NMD-90	3/4" PVC
30 Amps 2 Pole	<div style="display: flex; align-items: center;"> <div style="font-size: 3em; margin-right: 10px;">{</div> <div> <p>Feeder Circuit For Sub-Panel In garage</p> </div> </div>	3 #10 NMD-90	1 " PVC
40 Amps 2 Pole		3 #8 NMD-90	1 1/4" PVC
60 Amps 2 Pole		3 #6 NMD-90	1 1/2" PVC



NOTE
ALL CONDUCTORS ARE TO BE
OF THE NMD-90 TYPE



NOTE ALSO A BARE GROUND WIRE IS TO BE INSTALLED IN THE FLEXIBLE CONDUIT. THIS WIRE MAY BE INSULATED IF IT COMES WITH THE FIXTURE