



INFORMATION BULLETIN

No: B-E3 091214 2

MINIMUM REQUIREMENTS FOR UPGRADING OF ELECTRICAL SYSTEMS SINGLE FAMILY DWELLING

The following Bulletin provides guidance on the application of policy for the BC Safety Authority. Please check with municipal authorities having jurisdiction for local requirements.

Date of Issue: December 14, 2009

PART A: Service, Main Panel or Feeder Repair

1. All electrical work must be done under a valid electrical permit by a licensed contractor or a homeowner where allowed under Section 17 of the Electrical Safety Regulation.
2. Where a panel, main breaker or switch is repaired or replaced with one of the same amperage rating, the existing panel and conduit locations will normally be acceptable. Service grounding and bonding must be in good repair
3. It is the responsibility of the permit holder to ensure that all the circuits to be reconnected comply with rules 2-200 and 2-300 of the BC Electrical Code. Existing branch circuits which are adequate for the purpose may be reconnected without alteration.
4. FSR's must comply with the Safety Standards General Regulation, Section 26 (2) and notify the BCSEA before, or at the time of final inspection:
 - a. If unacceptable conditions for which they are not responsible remain; or
 - b. If they have been asked to perform work which may leave a portion of an installation in an unacceptable condition.

If either of the conditions in "a" or "b" exist, the Safety Officer will advise the owner and issue an order for corrections that must be completed within a reasonable time.

PART B: Service, Main Panel or Feeder Upgrade

1. All electrical work must be done under a valid electrical permit by a licensed contractor or a homeowner where permitted under Section 17 of the Electrical Safety Regulation.



2. It is the permit holder responsibility to ensure that all the circuits to be reconnected comply with rules 2-200 and 2-300 of the BC Electrical Code.
3. FSR's must comply with the Safety Standards General Regulation, Section 26 (2) and notify the BCSA before, or at the time of final inspection:
 - a. If unacceptable conditions for which they are not responsible remain; or
 - b. If they have been asked to perform work which may leave a portion of an installation in an unacceptable condition.

If either of the conditions in "a" or "b" exist, the Safety Officer will advise the owner and issue an order for corrections that must be completed within a reasonable time.

4. When the occupancy classification of a building is changed, the electrical installation must meet the requirements for the new occupancy classification.
5. When a building or installation is completely rewired or upgraded, all wiring must comply with the requirements of the current Regulations and BC Electrical Code.
6. When a building is partly rewired, upgraded or modified the following shall apply:
 - a. Additions to existing branch circuits must comply with the requirements of the BC Electrical Code.
 - b. Existing branch circuits which are adequate for the purpose may be reconnected without alteration subject to Rules 2-200 & 2-300 of the BC Electrical Code.
 - c. Grounding & bonding must meet the current requirements of the BC Electrical Code.
7. Overhead line clearance must be in compliance with Rule 6-112 of the BC Electrical Code.
8. Plug fuses, if used, are of a type that are non-interchangeable with fuses of a higher rating in accordance with Rule 14-204;
9. All outlet boxes and receptacles are bonded to ground in accordance with Section 10 or protected with GFCI in accordance with Rule 26-700 (8);
10. Receptacles rated at 15 amperes are on circuits having overcurrent protection set at not more than 15 amperes in accordance with Rule 14-600;
11. Existing exterior receptacles are GFCI protected in accordance with Rules 26-710 (n) and 70-122 (4);
12. Existing bathroom and washroom receptacles must be GFCI protected in accordance with Rule 26-700(11).
13. Circuits which have additional receptacles added in a dwelling sleeping area shall be AFCI protected.
14. Switches in bathrooms are located in accordance with Rule 30-320;
15. Electrical heating equipment in bathrooms must conform to Section 62;
16. Dryer circuits are supplied with an approved receptacle in accordance with Rule 26-744 (3);
17. Range circuits are supplied with an approved receptacle in accordance with Rule 26-744 (6); and



18. It is recommended that owners consult with the local Building Authority regarding requirements for smoke alarms and carbon monoxide alarms.

PART C: Reconnection of Existing Buildings or Installations

1. A building or installation which has been disconnected may be reconnected without modification providing that:
 - (a) The occupancy has not changed; and
 - (b) The existing circuitry is in accordance with rules 2-200 and 2-300; and is adequate for the intended purpose.
 - (c) Service grounding and bonding is in good repair, Rule 2-300.
 - (d) Overhead line clearances are in compliance with Rule 6-112 of the BC Electrical Code.

A handwritten signature in black ink that reads "Stephen Hinde". The signature is written in a cursive, flowing style.

Stephen Hinde
Provincial Safety Manager - Electrical

References:

Bill 19 – 2003	Safety Standards Act
BC Reg. 100/2004	Electrical Safety Regulation
BC Reg. 105/2004	Safety Standards General Regulation
BC Reg. 186/2009	B.C. Electrical Code

For more information on the British Columbia Safety Authority, please visit our web site at:
www.safetyauthority.ca