

Environment & Labour PO Box 697 Halifax, Nova Scotia B3J 2T8

ELECTRICAL BULLETIN 2007-01

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Date: May 31, 2007

Subject: General Electrical Bulletin (Repeal and compilation of previous Electrical Bulletins) **Rev1, May 2007**

Effective immediately all Electrical Bulletins issued from this office prior to January 31, 1999 are no longer in effect and are hereby repealed **except as noted below.**

The information in the earlier electrical bulletins may have been superceded by a new electrical bulletin , be contained in the Canadian Electrical Code Part 1 (CEC) or will no longer be permitted.

The following are requirements or interpretations from the previous electrical bulletins that are <u>still valid</u> and shall continue to be enforced throughout the Province.

<u>CEC- Rule 2-022</u> -Renovation of existing installations: (Minimum requirements for upgrading the service for a single family dwelling)

For the purpose of this rule where the service entrance characteristics are being upgraded such as an increase in service capacity or an upgrade from a two wire to a three wire service voltage the minimum requirements associated with that upgrade shall comply with the requirements as indicated in the most recent version of NSPI -Electrical Inspection Bulletin B-2-022.

<u>CEC -Rule 6-206 (1)(a)</u> - Consumer's service equipment location:

For the purpose of this rule the installation of the consumer's service equipment shall comply with Electrical Bulletin 2000-02 -Electrical Service Entrance Room Requirements issued from this office and as noted below.

A consumer's service entrance that is 250 A or 250 V or <u>less</u> shall not be located in a furnace or boiler room where the room temperature exceeds 30 degrees Celsius, has high humidity, condensation or a corrosive atmosphere. Where these conditions do not exist a consumer service entrance having a rating <u>less</u> than 250 A or 250 V may be permitted in furnace or boiler rooms provided 1 m clearance is maintained in front of the electrical equipment and no piping containing a liquid is run directly over the electrical equipment. (**Rev 1, May 2007**)

In addition to the above, generators shall not be located in an electrical service entrance room where a separate room is required. Generators shall not be located in boiler or furnace rooms. (**Rev 1, May 2007**)

In some cases a one hour rated enclosure built around the main incoming service may be acceptable provided all code clearances are met and the rated enclosure is located within the building. Special permission is required <u>prior</u> to any design or installation of such an installation.(**Rev 1, May 2007**)

Where a separate electrical room is required the requirement for a 1 hour rating of the electrical room is based on the National Building Code 2005 and is subject to the building inspectors interpretation of when it is required, any concerns on whether a 1 hour rating is required contact the local building inspector for the area in which the project is being built.(**Rev 1, May 2007**)

<u>CEC- Rule 6-206 (1)(e)</u>- Service boxes or other consumer's service equipment shall be as close as practicable to the point where the consumers service conductors enter the building:

For the purpose of this rule "as close as practicable "shall be <u>not more than 3 metres</u>. The 3 m applies to the length of service raceway or cable from once it enters the building to where it enters the service box. The 3 m length does not apply to the length of cable or conductors located within the service box.

<u>CEC-Rule 6-302 (1)</u> - Conductors of a consumer's service that are connected to an overhead supply service shall be installed in one of the following ways:

For the purpose of this rule the consumer service conductors shall be installed in one of the following methods:

a) Rigid metal conduit or rigid PVC conduit or

b) Busway or

c) Mineral insulated cable other than the lightweight type

<u>CEC- Rule 10-204</u> - Grounding connections for alternating current systems:

The following practices shall be used or permitted:

a) When a single position meter base is used the grounding conductor shall terminate at the service box.

b) When a multiple position metering trough is used the grounding conductor may terminate at the trough.

c) If the grounding is carried out as indicated in (b) the bonding of the service box shall be in accordance with rule 10-604.

d) A multiple position metering trough may also be grounded at each individual subservice box with either separate grounding conductors connected to the ground electrode or one grounding conductor of sufficient size connected to the ground electrode with each grounding conductor tapped to it. The taps shall be performed using either a compression connector or thermit weld joint.

e) The above requirements do not apply when a tingle voltage filter is used and rule 10-204 (1)(b) shall apply.

<u>CEC-Rule 26-248 (1&2)</u>- Dry core, open ventilated type transformers shall be mounted so that there is an air space of not less than 150 mm between the transformer enclosure and an adjacent surface except floors and where the adjacent surface is of combustible material the minimum separation shall be increased to 300 mm.

For the purpose CEC rule 26-248 (2) where the adjacent surface is 5/8" Type X gypsum board ,this shall be considered as "limited combustible" material and the separation of 150 mm shall be permitted.

However for the application of CEC rule 26-248 (3)(a) when a transformer is wall mounted on 5/8" Type X gypsum board it shall <u>not</u> be considered as meeting the requirements of 3 (a) -non combustible material and therefore the separation of <u>6 mm is not permitted</u> and the requirements of CEC rule 26-248(3)(b&c) shall be followed to allow a 6 mm separation. Where these requirements are not followed then a 150 mm separation is required.

The Provincial Chief Electrical Inspector may amend, revise or delete any of the above requirements or interpretations at any time in the future.

Any deviations or questions concerning this Bulletin may be forwarded to the: Provincial Chief Electrical Inspector - David MacLeod, C.E.I., P.Eng at 902-424-8018 or by email - macleodd@gov.ns.ca