
HIGH VOLTAGE INSTALLATIONS

The Winnipeg Electrical By-law requires that high voltage installations (exceeding 750 Volts) be designed, inspected, and certified by a Professional Engineer, entitled to practise in the Province of Manitoba.

Permit applications for high voltage installations must be accompanied by drawings and a “letter of intent”, both sealed by the responsible Professional Engineer.

The drawings shall outline the proposed work in sufficient detail to demonstrate that the installation will comply with Section 36 of the Electrical By-law, and shall include the following:

1. High Voltage equipment shop drawings bearing the Engineer’s review stamp;

2. Size of ground conductors and expected maximum fault current, demonstrating compliance with Table 51 and Rules 36-302 to 36-310;
3. Calculated station ground electrode resistance (using worst case soil conditions) and station ground potential rise (GPR), demonstrating compliance with Subrule 36-304(1); and
4. Calculated touch and step voltages, demonstrating compliance with Table 52 and Subrules 36-304(2), 36-308(3), and 36-312(5).

NOTES

1. Except as permitted by Rule 36-306, the resistance of the installed station ground electrode must be tested and any necessary changes made as described in Subrule 36-304(4).
 2. Hazardous touch voltages may appear on metal building components or other metallic structures that are electrically connected to the station ground electrode, even when such components and structures are located outside of the station ground electrode area.
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ELECTRICAL PLAN EXAMINATION



For more information on this bulletin or other requirements, please contact

Plan Examination Branch
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FAX: 204-986-3045

or



Winnipeg
at your service.

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Every effort has been made to ensure the accuracy of information contained in this publication. However, in the event of a discrepancy between this publication and the governing City of Winnipeg By-law, the By-law will take precedence.

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***Information required for
the electrical plan
examination of high
voltage installations***