

Informative bulletin: patient care areas

Guide to electrical patient care areas

Electrical patient care areas are areas used primarily for the provision of diagnosis, therapy or treatment involving body contact between a patient and medical electrical equipment.

Medical electrical equipment is electrical equipment that is intended by the manufacturer to be used in the diagnosis, treatment, or monitoring of a patient, or for compensation or alleviation of disease, injury or disability.

The classification of patient care is determined based on the frequency or type of contact with medical electrical equipment as per the following definitions from Standard CAN/CSA-Z32, Electrical safety and essential electrical systems in health care facilities:

- **Basic care area:** patient care area where body contact between a patient and medical electrical equipment is neither frequent nor usual.
- **Intermediate care area:** a patient care area where body contact between a patient and medical electrical equipment is frequent or normal.
- **Critical care area:** a patient care area where the induction and maintenance of general anaesthesia routinely occurs in connection with the examination or treatment of patients or where cardiac contact between a patient and medical electrical equipment is frequent or normal.

The CAN/CSA-Z32 Standard identifies medical facilities such as dental clinics, chiropractors' offices, physicians' offices, optometrists' offices, physiotherapists' offices, and others, in addition to traditional hospital facilities, as potentially having electrical patient care areas. The standard also lists examples of basic, intermediate, and critical care areas. According to the CAN/CSA-Z32 Standard, the responsibility for defining a facility's patient care areas lie with the facility administrator. The administrator is defined as the person responsible for operating the health care facility (or his or her designee).

Electrical permit requirements

Responsibility of the engineer

The local authority having jurisdiction requires that installations for where Section 24, Patient Care Areas, is applicable, the drawings and specifications shall be prepared, signed and sealed and issued for construction (IFC) by a Professional Engineer licensed to practice in the Province of Manitoba and skilled in the area of work. The design engineer's responsibility includes but is not limited to:

- Coordinating the accurate completion of the declaration form with the facility administrator.
- Providing sealed IFC electrical drawings detailing the locations and levels of patient care areas and patient care environments as required, including a detail for the installation of patient care wiring methods including grounding and bonding for the levels of patient care areas applicable to the project.

Responsibility of the facility administrator

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The facility administrator must complete the patient care areas declaration form (<https://www.hydro.mb.ca/service/permits/electrical-codes-and-standards/>) in coordination with the design engineer.

Testing

Once the installation is complete, testing as per the CAN/CSA Z32 Standard for the patient care installation must be completed. The test report must be submitted to Electrical Inspections upon request.

Minor alterations to existing patient care areas

Minor electrical alterations to existing health care facilities such as adding a new receptacle, lighting upgrade, data outlet installations using non-metallic outlet boxes and similar minor work, may not require engineering involvement or submittal of the patient care declaration form however, the responsibility for the following rests with the electrical contractor:

- Electrical contractor to provide the existing levels of patient care areas by obtaining the stamped engineered information from when the facility was constructed or last updated, Owner authorization is required.
- Submittal of a wiring and bonding detail with the permit application and installation of the wiring and bonding to meet the requirements for the applicable level of patient care.
- CAN /CSA Z32 testing as noted above including the test report.

The local authority having jurisdiction may request engineering involvement.



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Electrical patient care areas declaration

I, _____, am the administrator of
[print or type name of facility administrator]
_____ in Manitoba.
[print or type facility name]

I have read the Informative Note: Patient Care Areas and understand the area classifications requirements for patient care areas. (<https://www.hydro.mb.ca/service/permits/electrical-codes-and-standards/>)

Complete only one of the following: (A, B, C or D)

- A** This health care facility does not contain any areas used primarily for the provision of diagnosis, therapy, or treatment involving body contact between a patient and medical electrical equipment. Therefore, as detailed in the Guide, the above-named facility does not contain any electrical patient care areas.
- B** This health care facility contains areas used primarily for the provision of diagnosis, therapy, or treatment involving body contact between a patient and medical electrical equipment intended by the manufacturer to be used in the diagnosis, treatment, or monitoring of a patient, or for compensation or alleviation of disease, injury, or disability. Engineered sealed documents are provided to demonstrate wiring methods and grounding and bonding to meet requirements. As detailed in the Guide,
- the following rooms are classified electrically as Basic Care Areas:

 - the following rooms are classified electrically as Intermediate Care Areas:

 - the following rooms are classified electrically as Critical Care Areas:

- C** This health care facility contains electrical patient care areas which are all clearly designated on the submitted sealed drawings.
- D** This health care facility is undergoing minor electrical alterations to existing electrical patient care areas consisting of the work detailed below. The existing classifications have not changed, and no new patient care areas are being created. (Minor electrical alterations may consist of adding a new receptacle, a lighting upgrade, data outlet installations using non-metallic outlet boxes, and similar minor work.)

[signature of facility administrator]

[date]

[facility address]

[administrator phone number]

[administrator email]

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