Information Bulletin

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 – a 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 Winnipeg Electrical By-law requires that installations for where Section 24, Patient Care Areas, is applicable, the drawings and specifications shall be prepared, signed and sealed and the construction reviewed 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 the following:

Page 2 of 2

- a. Coordinating the accurate completion of the declaration form with the facility administrator.
- b. Providing sealed 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

The facility administrator must complete the City of Winnipeg Electrical patient care areas declaration form (winnipeg.ca/ppd/InfoCentre/Electrical/default.stm) 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 nor submittal of the patient care declaration form however, the responsibility for the following rests with the electrical contractor:

- 1. Determination of the existing levels of patient care areas by obtaining the engineered information from a previous permit when the facility was constructed, available via Central Files at ppd-centralfiles@winnipeg.ca. Owner authorization is required.
- 2. 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.
- 3. Z32 testing as noted above including the test report.

City of Winnipeg Plan Examination and Electrical Inspections Branches may request engineering involvement.