

S **SYSTEMS**
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CSA Z32 TESTING

CSA standard “Z32-15 Electrical Safety and Essential Electrical Systems in Health Care Facilities” provides requirements for electrical performance and safety in Patient Care Areas that supplement the requirements of the Canadian Electrical Code. It provides specifications for design and testing to ensure safety and effectiveness of the electrical installation in Patient Care Areas - in accordance with Section 24 of the CEC. The Z32 standard is also referenced in the CSA Z318.5 standard “Commissioning of Electrical Equipment and Systems in Health Care Facilities”.

Systems Electronics Limited Can Provide Patient Care Area Testing to CSA Z32

Systems Electronics Limited (SEL) has the specialized equipment, experience, and knowledge to provide the assurance that your Patient Care Areas meet the performance and safety requirements of Z32-15. SEL has been performing these tests for more than 20 years, and now, ON₂ Solutions helps to provide broader coverage.

Systems Electronics Limited performs and reports on the following tests:

- 5.4 Circuit Voltage Drop Test
- 5.6 Receptacles - Pull-Out Force, Polarity, Identification, Type of Receptacle, Ground Fault Circuit Interrupter Operation
- 5.9 Voltage Difference Between Ground Points in the Patient Care Area
- 5.10 Ground Return Path Voltage Rise for Grounded Systems

We also test for inadvertent Neutral to Ground faults using a patented process

Our REPORTS include a review of the test results, and our opinion on compliance with the standard. All the measured data of the Z32 tests are also provided.

Other special Z32 tests:

Test of Impedance to Ground and Hazard Index for Isolated Power Systems

Note: We normally do not perform test 5.3 - Conductor Insulation Integrity, and test 5.5 - Circuit Breakers - Mechanical Operation, as they are more efficiently, and usually, performed by the installer at the time of making connections to the breaker panel (we provide instruction for the installer).

Monte Raber, P. Eng. is the President of SEL. He has over fifty years' experience in Biomedical Engineering and Safety Standards. He is a member of the CSA committees on Sec 24 of the Canadian Electrical Code, the Technical Committee on Z32, and International committees relating to electrical safety in health care.

Systems Electronics Limited can meet your needs for electrical testing in Patient Care Areas.

The proprietary test set developed to perform the Z32 tests.

Individual DVMs are used for readout of electrical data to permit easier calibration.

