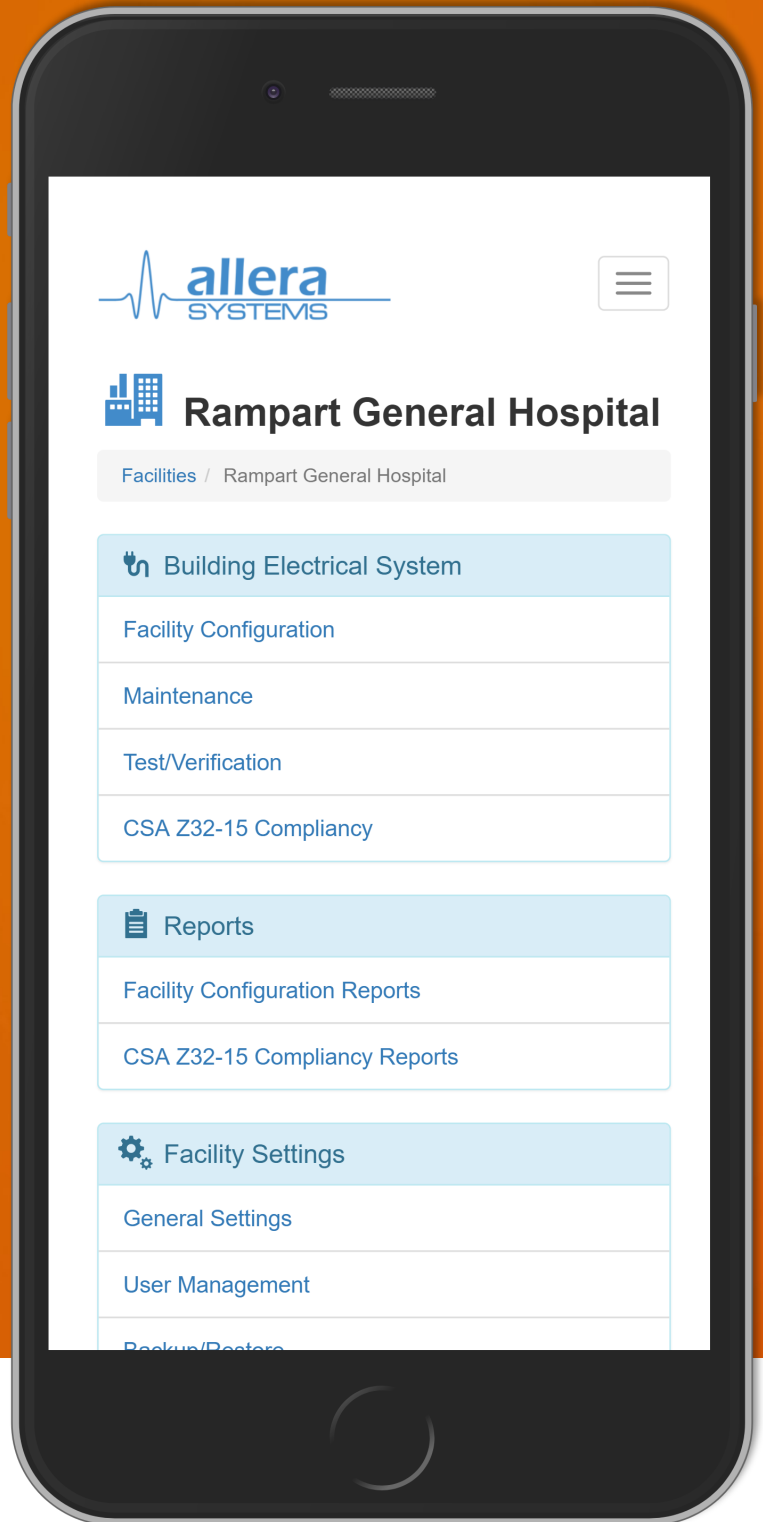




# Electrical Safety Management for Health Care Facilities



We make the products to help ensure your electrical systems are safe and reliable.

## What is compliancy?

Canadian health care facilities require compliancy to CSA Z32 (electrical safety and essential electrical systems in health care facilities) to support a safe and reliable building electrical system. Compliancy includes verification of performance of the electrical system in accordance with the Canadian Electrical Code as well as maintaining records of compliance both at the time of installation and periodically, based on the classification of each patient care area. Essentially, CSA Z32 provides methods of test and verification to ensure electrical systems perform as intended.

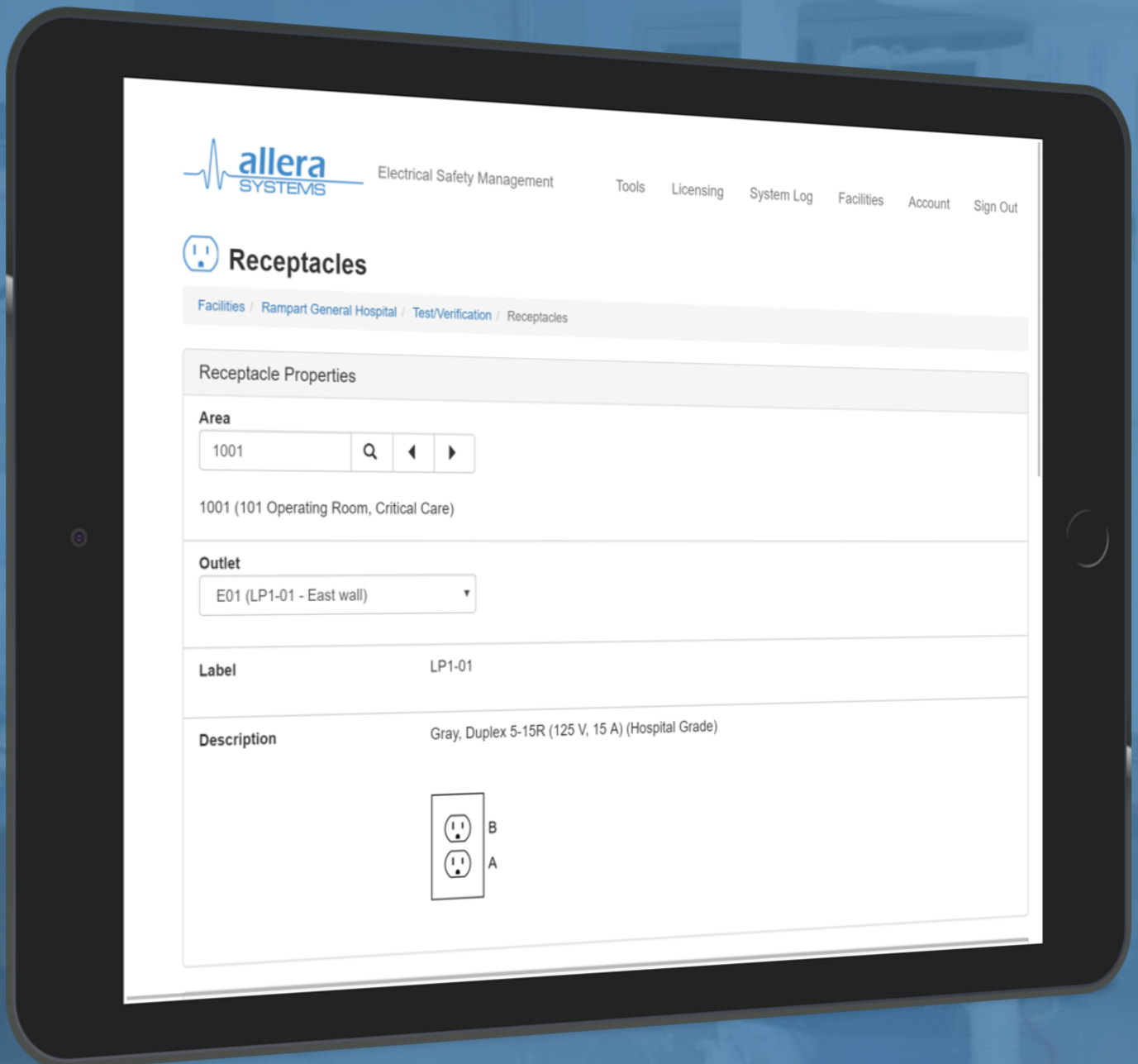
## Why verify compliancy?

The Canadian Electrical Code states that users should consult and refer to CSA Z32 as a means of verifying aspects related to electrical systems within health care facilities. Complying with CSA Z32 will:

- promote the safe delivery of medical services for patients
- help maintain a safe working environment
- assist in meeting municipal and provincial regulatory requirements
- work toward streamlining the accreditation process
- aid in the identification and mitigation of risk factors

# How can all of this be managed?

The Electrical Safety Management System collects and analyzes data to provide instant verification of compliancy at your fingertips. The system is based on a secure central server where user access is strictly controlled by the electrical administrator for each health care facility. Users interact with the system using a web browser from virtually any computing platform from mobile phones to desktop computers.



After initial sign-in, each user may populate a list of test equipment from any manufacturer for quick access during results entry. This “virtual toolbox” can be edited or updated at any time and used when test results are entered into the system.

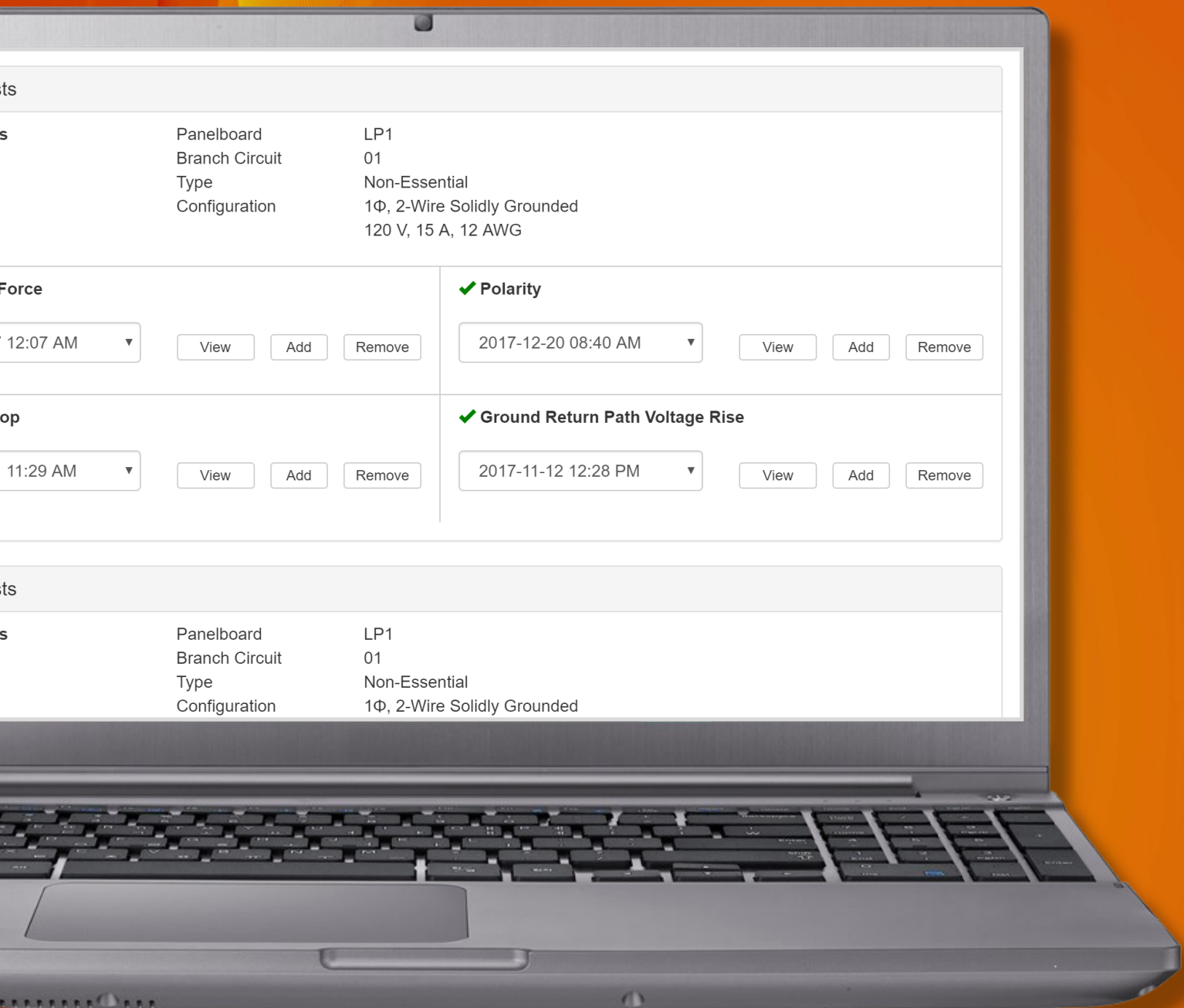
The system remembers the equipment used for a particular test and offers it automatically for quick and efficient entry of results.

### Test Equipment

Select 'Add' at the bottom of the list to add test equipment.

Allera Systems ALTS2400	CSA Z32 Test System S/N: 152079690103 Calibrated: 2016-01-01	<a href="#">Edit</a>	<a href="#">Remove</a>
	CSA Z32 Standard Load S/N: 152079696722 Calibrated: -	<a href="#">Edit</a>	<a href="#">Remove</a>
	Multimeter S/N: 26370001 Calibrated: 2019-02-07	<a href="#">Edit</a>	<a href="#">Remove</a>
	Insulation Tester S/N: 27785118 Calibrated: 2016-01-01	<a href="#">Edit</a>	<a href="#">Remove</a>
	Insulation Tester S/N: 27780119 Calibrated: 2016-01-01	<a href="#">Edit</a>	<a href="#">Remove</a>
	Receptacle Retention Tester S/N: Calibrated: -	<a href="#">Edit</a>	<a href="#">Remove</a>





Results can be entered at the time of test or later, from field notes.

Test results details include the time the test was performed, who performed the test, and the equipment used.

Stored data can be retrieved at any time to verify individual compliancy, or collectively as one of several prepared reports.

# Quick and Easy

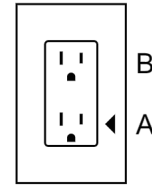
The test time is automatically set to the current time and can be easily adjusted if entering the results at a later date.

Selection of test equipment is quick and easy and defaults to the last used for the same test.

All test and verification entry screens present a summarized test procedure.

Only measured values are recorded - no need to calculate inferred results.

5-15R, Group A



Test Time

Date/Time



2018-10-03 02:22 PM

Test Equipment

Test Procedure

Determine the branch circuit voltage drop:

- apply a load of 80% of the rated current of the circuit between the receptacle poles for 1 to 5 s and record the current  $I_L$
- record the terminal voltage under load as  $V_{LOAD}$
- remove the load and immediately record the terminal voltage as  $V_{OFF}$

Test Procedure

Test Results

$I_L$

12.0

$V_{LOAD}$

118.6

$V_{OFF}$

121.4

Unloaded RMS line-neutral voltage (V)

Add Results

Cancel

# Receptacle

Facilities / Rampart Gene

## Receptacle Property

### Area

1001

1001 (101 Operating R

### Outlet

E01 (LP1-01 - East

### Label

### Description

## Group A Tests

### Circuit Details

Panelboard LP1  
 Branch Circuit 01  
 Type Non-Essential  
 Configuration 1Φ, 2-Wire Solidly Grounded  
 120 V, 15 A, 12 AWG

### Retentive Force

2018-12-27 12:07 AM

### Voltage Drop

2017-06-21 11:29 AM

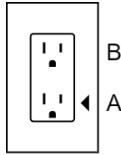
## Group B Tests

### Circuit Details

Panelboard LP1  
 Branch Circuit 01  
 Type Non-Essential

## Voltage Drop Test Results

Area 1001 (101)  
 LP1-01 (E01)  
 5-15R, Group A



Compliant



### Tester Information

**Name** Salvador Philbeck  
**Company** Corellian Engineering Inc.  
**Test Time** 2017-06-21 11:29 AM

### Test Equipment

**Manufacturer** Allera Systems  
**Model Number** ALTS2400  
**Description** CSA Z32 Test System  
**Serial Number** 152079694392  
**Cal Date** 2016-09-21

### Collected Data

$I_L$	11.9 A, 79.5% (avg)	✓
$V_{LOAD}$	117.67 V (avg)	✓
$V_{OFF}$	121.19 V (avg)	✓
$V_{DROP}$	3.52 V	✓
% drop	2.9%	✓

OK

- Additional calculations are made using the measured results as per CSA Z32
- Test results can be viewed immediately to determine compliancy
- Graphical checks indicate critical points in determining CSA Z32 compliancy

Whether you're a health care facility operator or administrator, keeping track of CSA Z32 maintenance records is a daunting task without the help of a secure, online management system. The Allera Systems Electrical Safety Management System alleviates the burden of record keeping and compliancy checking. With dozens of reports available from system configuration to test and verification results, keeping track of electrical safety is right at your fingertips.

Electrical code compliancy for health care facilities is verified through test procedures outlined in the CSA Z32 Standard. Qualified personnel along with product offerings from Allera Systems reduces time and cost and demonstrates due diligence for health care facilities.



CSA Z32

List of R  
Gen

**Facility Information**

Rampart General Hospital  
101 Main Street  
Stratford, ON N7R 1A0  
Canada

**Receptacles (Area 1001, 101 Operating Room, Critical Care)**

Label	Outlet	Outlet Description	CSA Config	Colour	Installed	Group	Panelboard	Br
LP1-01	E01	East headwall - upper	5-15R	Gray	2013-12-21	A	LP1	01
						B	LP1	01
LP1-01	E02	East headwall - lower	5-15R	Gray	2013-12-21	A	LP1	01
						B	LP1	01
LP1-03	E05	East headwall - upper	5-15R	Gray	2013-12-21	A	LP1	03
						B	LP1	03
LP1-03	E06	East headwall - lower	5-15R	Gray	2013-12-21	A	LP1	03
						B	LP1	03
LP1-05	E09	East headwall - upper	5-15R	Gray	2013-12-21	A	LP1	05
						B	LP1	05
LP1-05	E10	East headwall - lower	5-15R	Gray	2013-12-21	A	LP1	05
						B	LP1	05
LP2-01	E03	East headwall - upper	5-15R	Gray	2013-12-21	A	LP2	01
						B	LP2	01
LP2-01	E04	East headwall - lower	5-15R	Gray	2013-12-21	A	LP2	01
						B	LP2	01
LP2-03	E07	East headwall - upper	5-15R	Gray	2013-12-21	A	LP2	03
						B	LP2	03
LP2-03	E08	East headwall - lower	5-15R	Gray	2013-12-21	A	LP2	03
						B	LP2	03
LP2-05	E11	East headwall - upper	5-15R	Gray	2013-12-21	A	LP2	05
						B	LP2	05
LP2-05	E12	East headwall - lower	5-15R	Gray	2013-12-21	A	LP2	05
						B	LP2	05



# Peace of Mind

Allera Systems is the leading developer of CSA Z32 products and services for test and verification. Visit our website to learn more about how we can help you.

[www.allerasystems.com](http://www.allerasystems.com)



## CSA Z32-15 Compliance Report Facility Compliance (Summary)

CSA Z32-15  
Generated: 2018-02-23 3:32PM

### Facility Information

Rampart General Hospital  
101 Main Street  
Straestead, ON P7R 1A0  
Canada

### Report Summary

**Compliant**

This facility is deemed compliant based on the results of the last audit dated:  
2018-02-23 10:32AM

### Facility Configuration

#### Patient Care

Critical Care  
Intermediate  
Basic Care...  
Non-Care...

#### Patient Care

Beds.....  
Baths.....  
Chairs.....  
Exam Tables.  
Treatment Ta  
Therapy Tabl  
Neurological  
Surgery Tabl  
Imaging Tabl  
Urology Tabl  
Mat Tables..  
Change Table  
Bassinets Car



Electrical Safety Management

Tools

## CSA Z32-15 Compliance

Facilities / Rampart General Hospital / CSA Z32-15 Compliance



**Compliant to CSA Z32-15**

(as of 2018-02-23 10:32 AM)

### Facility Configuration

#### Patient Care Areas

Critical Care	2
Intermediate Care	0
Basic Care	165
Non-Care	4

#### Electrical System

Panelboards

Branch Circuits

Outlets

Receptacles

Groups

Line Isolation Mon



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