



Updated on April 17, 2020

Temporary Emergency Health Care Facility (TEHCF)

Introduction

Given the current situation with COVID-19 and its potential impact on the capacity of the health care system, this document highlights major electrical safety requirements when using existing buildings or temporary structures as TEHCF.

The intent of this document is to assist in the rapid conversion of these facilities by providing a deviation, as described herein, to the requirements of the Ontario Electrical Safety Code (OESC) regarding basic and intermediate patient care areas (as defined in OESC) *as well as recovery centres*, while requiring the TEHCF to maintain an acceptable level of electrical safety.

*For the purpose of this document, a TEHCF is a building or structure that is used or intended to be used to provide, on a temporary basis for the purpose of responding to the COVID-19 emergency, health care by or on behalf of a health service provider or a government (including a municipality).*¹

For the purpose of this document, a competent person is defined under the Occupational Health and Safety Act (OHSA), and may be a licensed electrical contractor (LEC); a professional engineer; or a qualified employee of the TEHCF

OESC Requirements for TEHCF

Unless requested by the health care administrator(s) responsible for planning, organizing, directing, and controlling the TEHCF, "Section 24 - Patient care areas" of the OESC need not apply. In general, requirements of Section 76 "Temporary Wiring" of the OESC shall be permitted for the temporary use of establishments used as TEHCFs. Examples of TEHCFs include but are not limited to:

- Hotels and student dorms
- Field hospitals
- Heated garage space (parking garages)
- Arenas and exhibition places.
- Large open manufacturing spaces.

¹ This definition references and adopts the definition in O.Reg. 141/20 made under the *Emergency Management and Civil Protection Act*, except to the extent that definition refers to temporary health facilities.
(<https://www.ontario.ca/laws/regulation/200141>)



Establishing a TEHCF

It is recognized that some buildings may require less electrical work than others to be ready to house patients (such as hotels and student dorms), while other types of buildings may need more electrical work to accommodate patients (such as heated garages, manufacturing spaces and arenas). Compliance with Section 24 of the OESC is not required nor is an application for a deviation, provided that all the conditions below are met:

1. Assessment

A competent person in conjunction with the health care administrator(s) shall determine if the existing electrical infrastructure is adequate to support the electrical demand of the proposed TEHCF. This should include existing feeders, branch circuits, and emergency power supply (i.e. stand-by generation).

For example, if an emergency power supply is required in a facility without back-up power, consideration might be given to have the entire facility backed-up to minimize routing of temporary distribution and wiring. Non-essential loads in a hotel (such as saunas, hot tubs, swimming pools, gyms, etc.) may be disconnected from the supply to optimize the size of emergency power supply required, and provide more capacity for essential loads.

If there is an existing emergency power supply, selected feeders and branch circuits for TEHCF are permitted to be connected to the emergency power supply when a competent person determines it will have no adverse effects.

For other buildings or structures to be converted to TEHCFs (such as tents, parking garage buildings, manufacturing spaces, arenas, etc.), the assessment shall include:

- Determination if existing service is adequate;
- The need for additional outlets (such as receptacles); and
- Whether temporary distribution is required

A sketch of electrical modifications and/or additions to the distribution system is required for discussion with the ESA local area inspector.

2. Testing

Prior to occupation of the TEHCF, basic testing should be done by a competent person, such as:

- a. All receptacles located in areas intended primarily for the provision of diagnosis, therapy, or care of patients shall be tested for polarity and bonding.
- b. Metal Objects and electrical equipment shall be tested to ensure they are not inadvertently energized.
- c. Ground Fault Circuit Interrupters (GFCIs) in areas within 1.5 meters of sinks or wet environment shall be tested for proper operation.

3. Installations and wiring methods

- a. All electrical equipment and wiring shall be approved for the purpose
- b. All electrical installations shall be performed by a person in accordance with the Ontario Regulation 570/05 – “LICENSING OF ELECTRICAL CONTRACTORS AND MASTER ELECTRICIANS”
- c. All electrical distribution equipment is recommended to be lockable or accessible only to authorized personal
- d. When additional feeders, branch circuits, or panel boards are required:
 - i. They are permitted to be installed in accordance with the general requirements of the OESC including Section 76 – Temporary Wiring; and
 - ii. Portable electrical distribution and power panels (similar to what is used by the entertainment or construction industry) are robust and well suited for this applications
- e. Connection of temporary wiring to existing distribution systems is permitted, and shall not expose occupants to unsafe or energized portions of the electrical system. Temporary Wiring including flexible cords shall be suitable for the purpose and protected from mechanical damage and installed in such a manner that it will not create tripping hazards.
- f. When needed, use of extension cords rated for extra-hard usage and wet locations are recommended. They are less susceptible to mechanical damage and can withstand wet environment conditions when cleaning or disinfecting. Use an appropriate cable size for the equipment connected. Where cords are used in areas subject to wet



conditions, such as standing fluids, GFCI protection of the Class A type is required.

- g. Electrical rooms shall be secured from unauthorized persons, and not used for storage.
- h. The electrical installation and equipment shall be continually monitored for damage and shall be repaired replaced, or disconnected as soon as possible.
- i. Outlets and receptacles shall be marked or labelled for new branch circuits overcurrent devices at the distribution panel and at the load.

Plan review and inspection for TEHCF

A notification of work is required as per Rule 2-004 for wiring a temporary structure or the conversion of an existing facility to a TEHCF prior to occupancy by the TEHCF. This can be obtained on a priority basis by calling ESA Customer Service Centre at 1-877-372-7233 (1-877-ESA-SAFE).

Plan review submittal will not be required for TEHCF at the present time.

Consultation or Additional Technical Advice

For consultation or additional technical advice, please contact your Local/Senior Inspector or Regional Technical Advisor.

Local/Senior Inspector can be found at - <https://findaninspector.esasafe.com/ILT>

Technical Advisors:

Northern Region

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