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News, Views and Updates from the Electrical Safety Authority

Summer 2019

Licensed Electrical Contractors MUST:

1. Hold all required qualifications and licences.
2. Secure all appropriate permits and inspections.
3. Provide a copy of the ESA Certificate of Inspection.

“ Illegal electrical work puts Ontario residents at serious risk of injury ”

Joel Moody,
Chief Public Safety Officer, ESA

Unlicensed Contractors Receive Multiple Convictions

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Commercial Renovation Investigation Program Update

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Year-To-Date Convictions Jan. 1, 2019 – March 31, 2019

Unlicensed

Sean Chapman, Ottawa

Replaced panel

- \$3,000 fine, plus \$750 victim surcharge
– no EC licence

Derek Mark Sankar, operating as MJ Construction, Dundas

General contractor hired for kitchen renovation

- \$5,000 fine, plus \$1,250 victim surcharge
– no EC licence
- \$5,000 fine, plus \$1,250 victim surcharge
– failure to apply
- \$5,000 fine, plus \$1,250 victim surcharge
– unsafe electrical conditions

Leonardo Parra, operating as Parra Design/Build, London

Residential renovation

- \$3,000 fine, plus \$750 victim surcharge
– no EC licence
- \$1,500 fine, plus \$375 victim surcharge
– failure to apply

Reggie's Renovations, St. Catharines

Residential renovation

- \$3,000 fine, plus \$750 victim surcharge
– no EC licence
- \$1,500 fine, plus \$375 victim surcharge
– failure to apply

Alexander Bonello, operating at BTEK Renewable Energy Products, Tottenham

Solar installation

- \$7,500 fine, plus \$1,875 victim surcharge
– no EC licence
- \$2,500 fine, plus \$625 victim surcharge
– failure to apply

Banjin Bamerni, operating as BGC Home Renovations, Kitchener

Basement wiring

- \$2,500 fine, plus \$500 victim surcharge
– no EC licence

David John, Oshawa

Pot lights

- \$3,000 fine, plus \$750 victim surcharge
– no EC licence

Peter Legere, Bobcaygeon

Bathroom renovation

2 locations

- \$3,000 fine, plus \$750 victim surcharge
– no EC licence
- \$3,000 fine, plus \$750 victim surcharge
– no EC licence
- \$1,500 fine, plus \$375 victim surcharge
– failure to apply

Gino Macchi, Thunder Bay

Residential wiring

- \$5,000 fine, plus \$1,250 victim surcharge
– no EC licence

Tom Stirling, Niagara Falls

Residential wiring

- \$3,000 fine, plus \$750 victim surcharge
– no EC licence

David John, Oshawa

Pot lights

Was convicted on July 24, 2017 and appealed on March 29, 2019. Penalty was reduced to:

- \$3,000 fine, plus \$750 victim surcharge
– no EC licence
- \$3,000 fine, plus \$750 victim surcharge
– no EC licence

Licensed

Tron Electric Inc., Woodbridge

Residential renovation

- \$10,000 fine, plus \$2,500 victim surcharge
– failure to apply
- \$5,000 fine, plus \$1,250 victim surcharge
– unauthorized electrical connection

2018 Ontario Electrical Safety Code Expands Tamper-resistant Receptacle Requirements

The 2018 Ontario Electrical Safety Code (OESC) became effective May 16, 2019. Expanding the requirement of tamper-resistant (TR) receptacles is one of the main changes in the new edition of the OESC. The requirement is expanded to guest rooms of hotels, preschools and elementary education facilities. Requiring TR receptacles first came into effect for homes in the 2009 edition; the requirement then expanded to childcare facilities in the 2015 edition and finally this new change expands it to guest rooms of hotels, preschools and elementary education facilities.

The injury statistics highlight the rationale behind such an expansion in the OESC requirements.

Most electrical injuries were caused by contact with low-voltage receptacles, appliances/equipment, cords or wiring and 43 per cent of injury cases were caused by contact with an electrical receptacle.

Overall, when adjusted for age and sex, the proportion of electrical injury cases reported to the CHIRPP was highest among children aged 0–9 years with 67.5 per cent. Most

electrical injuries were caused by contact with low-voltage receptacles, appliances/equipment, cords or wiring and 43 per cent of injury cases were caused by contact with an electrical receptacle.

Do You Know the Requirements?

The requirement for TR receptacles applies to *new or replacement* outlets. Although it's not required to bring current outlets up to OESC requirements, if they were installed prior to the applicable OESC requirements coming into effect, replacing the old ones with TR receptacles can help keep kids safe from potentially serious electrical injuries.

26-706(g) Tamper Proof Receptacle Required

All 5-15R and 5-20R receptacles within a dwelling units, child care, guest rooms and suites of hotels and motels; preschools and elementary education facilities (up to Grade 8) shall be TR and so marked. The rule exempts receptacles located above 2 metres from the floor or grade, or those intended for a stationary appliance and located such that they are inaccessible. Additionally, for utility or mechanical rooms in education facilities, ESA will not require TR receptacles to be installed, since these locations require authorized access only.

Looking at the injury numbers and the fact that difference in cost between TR and standard receptacles is now negligible with the increased use of TR receptacles, the expansion of the requirements makes sense. The safety impact outweighs the additional costs incurred while reducing injuries to children.



Standard C22.2 No. 42, Clause 6.18 Marking - Tamper-resistant receptacles are marked with "TR"

REFERENCE

Crain, J., McFaul, S., Thompson, W., Skinner, R., Do, M. T., Fréchette, M., & Mukhi, S. (2016). The Canadian Hospitals Injury Reporting and Prevention Program: a dynamic and innovative injury surveillance system. *Health promotion and chronic disease prevention in Canada: research, policy and practice*, 36(6), 112.

Unlicensed Contractor Publicized as a Buyer Beware

When homeowners Tara Cohen and Milan Paynton first hired Alexander Bonello, operating as Btek Renewable Energy Products, they were both excited at the idea of additional cost savings from the installation of solar panels to their home. They thought they hired a reputable contractor to do the job but quickly became concerned with the quality of work being completed when Bonello cut through the garage wall with a circular saw, and in doing so, cut the main feed line through the electrical sockets under the panel.

The homeowners reached out to another solar installation company who advised they contact the Electrical Safety Authority (ESA). The subsequent investigation uncovered that Bonello was operating without an Electrical Contractor (EC) licence and he failed to apply for an inspection for the work being completed. ESA also determined that the wiring did not meet the minimum standards of the OESC and would have posed a danger if energized.



Bonello was convicted on Feb. 21, 2019 in the Ontario Court of Justice in Orangeville for conducting electrical work without a licence and for failing to apply for an inspection. In addition to fines and victim surcharges, Bonello's conviction was publicized in

major news outlets such as the Toronto Star and Orangeville Banner, to further educate the general public on the importance of hiring a Licensed Electrical Contractor (LEC) and how to distinguish an LEC from an unlicensed contractor.



Update from the Director, Contractor Licensing

As part of ESA's continuous efficiency improvements, Contractor Licensing has recently conducted a review of its process in relation to issuance of warning notices as part of its progressive compliance approach. Specifically, a new process has now been implemented which will ensure proportionality, consistency and fairness in addressing licence holders' failure to file a notification pursuant to the requirements by the OESC.

Unlicensed Contractor Ordered to Pay \$25,000 for Unsafe, Illegal Electrical Work in Hamilton, Flamborough Township, Burlington, Paris and Oakville

On Jan. 15, 2019 Leonard Sankar, owner and operator of M J Construction, was convicted in a Hamilton court for conducting unsafe electrical work without an EC licence.

Sankar was ordered to pay a **\$25,000 fine** plus a **\$6,250 victim fine** surcharge for the unlicensed work his company conducted at seven locations in Hamilton, Burlington, Oakville, Paris and Township of Flamborough.

Leonard Sankar pleaded guilty to 13 charges in total, including multiple counts of working without an EC Licence and not taking out an electrical permit. He also pleaded guilty to one count of unsafe electrical condition where a live wire was left hanging in the basement of a home. If someone had touched the exposed wires, they could have received a fatal shock.

In order to ensure that the locations where the electrical work was completed was compliant with the OESC requirements M J Construction hired a licensed electrical contractor to go to all of the locations flagged by the ESA so the electrical work could be corrected of any defects. This was completed at most of the addresses and was done at the expense of M J Construction.

It should be noted that Derek Sankar, manager of M J Construction, was convicted before on June 20, 2017 of doing electrical work without an EC licence, for failing to apply for inspection and for unsafe electrical conditions. Much of the electrical work M J Construction did at the time was found to be non-compliant with the OESC; there were numerous defects in the electrical work.



Commercial Renovation Investigation Program Update

Electrical work conducted by individuals or companies without the appropriate licence/qualification may create unsafe conditions. To address this, ESA initiated a program in 2017 which focuses on those performing electrical work without filing notifications and operating outside the licensing requirements to verify compliance and safety of electrical work performed in the renovation sector. From April 2018 to March 2019, ESA conducted inspections in the Sault Ste. Marie, London, Kingston, Belleville, and Vaughan areas.

Additionally, 15 investigations were initiated based on the program findings, as well charges have been filed against two contractors who were operating without a valid EC licence.

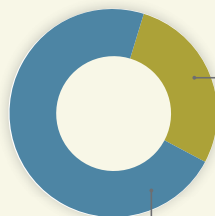
ESA will continue to expand the current program under the name Renovation Inspection Program

RESULTS FY19:

587 inspections were completed

Of the 587 completed, 226 sites were found to have no permits as required.

Of these



NO PERMIT

15 related to unlicensed contractors

57 were property owners or companies who performed work without permits but did not require an EC licence

PERMIT

154 involved LECs who did not obtain permits.

to build on progress achieved by the Commercial Renovation Investigation Program as well as introduce and roll out rotating pilots for the residential renovation sector in at least two regions.

Please be sure that you are notifying the ESA Customer Service Centre of the full scope of electrical work and requesting permits within 48 hours of the work being done.

Consultation on ESA 2020 Wiring Fees

ESA has launched a stakeholder consultation on planned wiring fee updates to come into effect when Risk-based Oversight (RBO) goes live in early 2020.

ESA is not increasing existing fees as published in its fee guide, found at www.esasafe.com/fees on ESA's website. As all LECs in the province will operate under RBO, ACP membership and ACP-specific wiring fees will be discontinued when RBO goes live in 2020. All LECs in Ontario will pay the same fees found in the ESA Fee Guide. Benefits that ACP currently offers, like pre-authorized connections, will still be available for LECs that meet eligibility criteria.

ESA is proposing some fee reductions in the existing ESA Fee Guide to support RBO, as well as updates to various individual fees for the sake of clarity.

Fee consultation materials are available at www.esasafe.com/consultations on the ESA website. The fee consultation is open from Monday June 3 to Friday July 5. Instructions on how to participate are available online.

These proposals come after hearing broad internal and external feedback, including advice from LECs across the province during RBO town hall meetings.



RBO Defect Ratio Update

Risk-based Oversight and Defect Ratios

In early 2020, ESA will move to a risk-based approach called Risk-based Oversight (RBO) for electrical wiring. This means ESA will visit low-risk electrical wiring work less often than medium or high-risk work (selective inspection). To determine these risk levels, ESA assesses electrical wiring work using nine “attributes.” One of these nine attributes is a contractor’s defect ratio.

A defect ratio is just one of nine attributes that determines risk rating. Other attributes consider what the work is and where the work takes place. ACP contractors will already be familiar with defect ratios. ESA has tracked defect ratios for over 15 years for ACP contractors, and it is a measure of compliance to the Ontario Electrical Safety Code.

Q What is my company’s defect ratio?

ESA sent contractors a defect ratio in March 2019. We will continue to do that every three months, so that those with higher defect ratios have a chance to reduce them before RBO goes live. When RBO goes live, you will be able to access ESA visit and defect information online.

Q How does a low defect ratio help me?

One of the benefits of maintaining a low defect ratio (the lowest being 0%) is that ESA could visit you less often – so you can spend more time running your business and less time waiting for ESA to visit your site. During ESA’s RBO town halls, ESA heard from contractors that they want recognition for a history of code compliant work and filing notifications. So under RBO, if you:

have a defect ratio of
10% or less

file a minimum of
10 notifications
in a **12-month**
rolling window

You will be eligible to enjoy benefits such as pre-authorized service reconnections from ESA.

Q What types of defects are included in the defect ratio?

Technical defects and warning defects are included but weighted differently. An ESA Inspector writes a technical defect when an electrical installation does not comply with the OESC. An ESA Inspector writes a warning defect when the electrical installation does not comply with the OESC and the likelihood of shock, fire and exposure is low. One technical defect is equal to one defect. Five warning defects are equal to one defect. Administrative defects do not count toward the defect ratio.

A defect ratio is calculated using the formula below:

$$\frac{\text{Number of site(s) with defects}}{\text{Number of site(s) visited}} = \% \text{ Defect Ratio}$$

Q How do I get more information?

We want you to be able to enjoy selective inspection and benefits under RBO.

Learn more about how you can do that at www.esasafe.com/rbo.

Questions? Email us!
rbo@electricalsafety.on.ca

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What's Happening

SAVE THE DATE

**2019 Annual Meeting & Ontario
Electrical Safety Awards**

September 26, 2019 | Living Arts
Centre, Mississauga

2019 Licence Holder Meetings

St. Catharines Meeting:

Oct. 22, 2019 | Holiday Inn & Suites
Parkway Conference Centre,
327 Ontario Street, St. Catharines

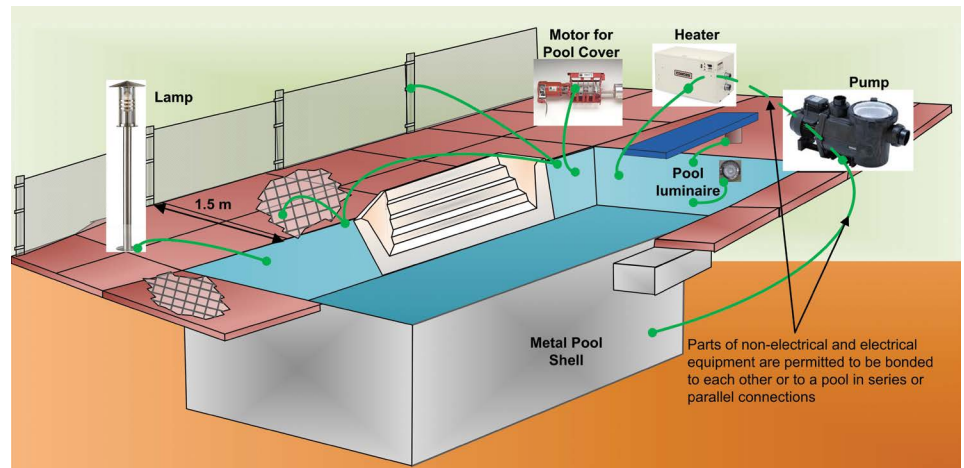
GTA Meeting:

Nov. 19, 2019 | Mississauga Grand,
35 Brunel Road, Mississauga

Bonding of Non-Current-Carrying Metal Parts of Pools




Over the past year, ESA Inspectors have identified over 300 defects regarding missing bonding of non-current-carrying metal parts of swimming pools. Missing bonding may create an electric shock hazard that could lead to Electric Shock Drowning (ESD).

Rule 68-058 of the OESC requires all metal parts of the pool and of other non-electrical equipment associated with the pool to be bonded together and to non-current-carrying metal parts of electrical equipment. This includes piping, pool reinforcing steel, ladders, diving board supports and fences within 1.5 m of the pool. The Rule also applies to decorative-type pool luminaires and lighting equipment not located in a forming shell, metal screens of shields for underwater speakers, conduit and junction boxes by a copper bonding conductor.



The required bonding for swimming pools is important to create equipotential surface, and eliminate any potential difference in the body of water.

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 We'd like your input

Please send your comments or story ideas to plugged.in@electricalsafety.on.ca.

You're invited to the **2019 ANNUAL** LICENCE HOLDER MEETING



Two dates and locations to choose from:

OCTOBER 22 **ST. CATHARINES**

Meeting:

1 p.m. – 3 p.m.

(Registration opens at 12:15 p.m.)

Technical Hour —

**Question & Answer Session
with an ESA Technical Advisor**

3 p.m. – 4 p.m.

Holiday Inn & Suites
Parkway Conference Centre
327 Ontario Street
St. Catharines, ON L2R 5L3

NOVEMBER 19 **MISSISSAUGA**

**ESA & Electrical Industry
Partner Kiosks:**

Noon – 12:45 p.m.

Meeting:

1 p.m. – 3 p.m.

(Registration opens at 12:15 p.m.)

Technical Hour —

**Question & Answer Session
with an ESA Technical Advisor**

3 p.m. – 4 p.m.

Mississauga Grand
35 Brunel Road
Mississauga, ON L4Z 3E8

RSVP BY:

St. Catharines:
October 21, 2019

Mississauga:
November 18, 2019

Agenda Highlights

- Tackling the underground economy – update on ECRA/ESA enforcement activities including the year's major convictions
- Sharing results of ESA's Renovation Inspection Program
- Update on ESA's Licensing Strategy
- Update on ESA's transition to a risk-based oversight approach for wiring inspections
- Question and Answer session
- Prize Draw
- Technical Hour – Ask a Technical Advisor your code questions

How to Register

Online: www.esasafe.com/licensing/lhm

Email: esa.lhm@electricalsafety.on.ca

Phone: (905) 712-5385

Fax: 1-888-251-7377

Fax-Back Information

Choice of location (Check one):

St. Catharines – Oct. 22, 2019

Mississauga – Nov. 19, 2019

Company Name:

(Please print)

ECRA/ESA Licence Number:

Phone Number:

Names of Employees Attending:

(Please print clearly)

1. _____

2. _____

3. _____