News, Views and Updates from the Electrical Safety Authority

PLUGGED IN

FALL 2023

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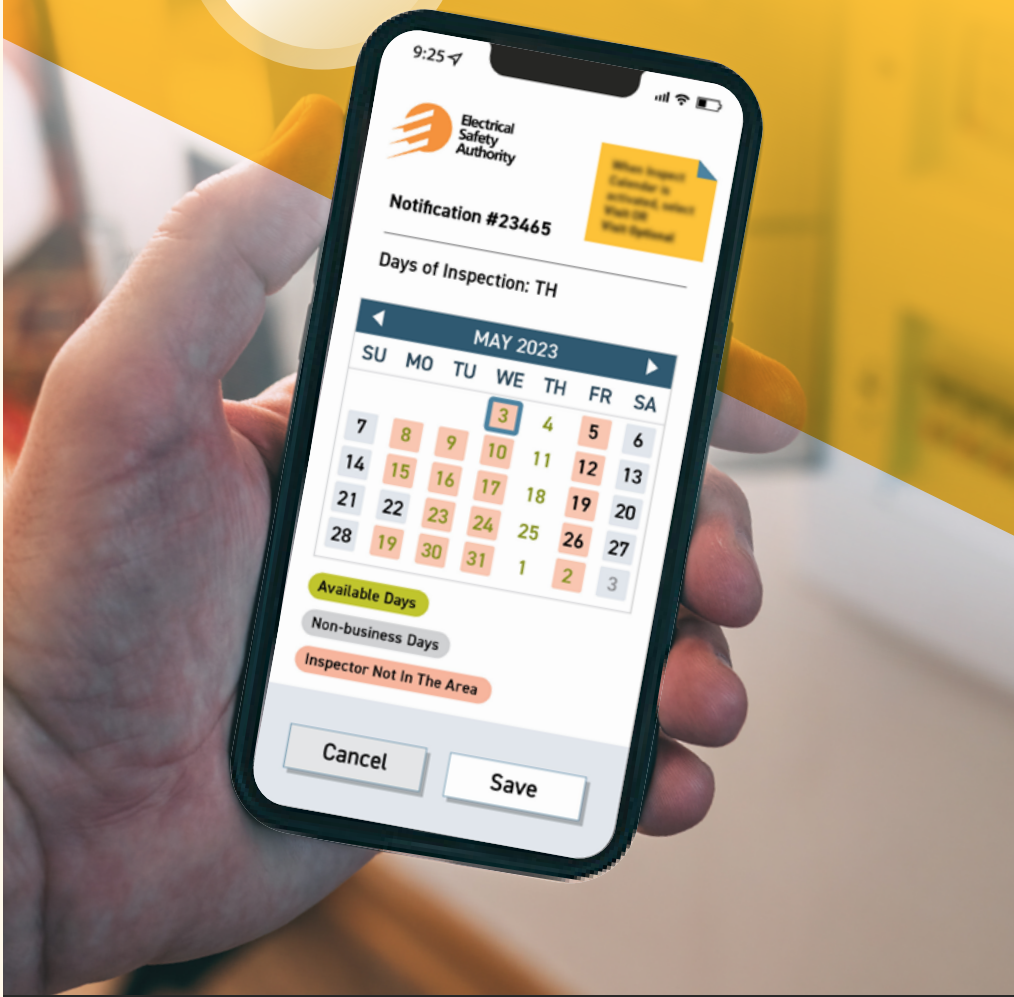
COMING SOON to the ESA ON Mobile App in 2024



Electrical Safety Authority

Convictions (1 May/23 – 30 Jul/23)

Unlicenced

Shahbaz Abdullah

Advertised electrical services while not licensed on Kijiji platform, Mississauga.

- $1,500.00 fine, $375.00 victim surcharge – advertising

Bradley Egan

Renovations at residence – one site, Sheeden.

- $1,500.00 fine, $375.00 victim surcharge – No Notification of Work
- $3,000.00 fine, $750.00 victim surcharge – No EC licence

Oscar Lewis – Repeat Offender

Renovations at three commercial sites, Ottawa.

- $3,000.00 fine on three separate counts for a total of $9,000.00, or $11,340.00 with victim surcharge – No Notification of Work
- $5,000.00 fine on two separate accounts, and $6,000.00 on a third, for a total of $16,000.00 or $20,000.00 with victim surcharge. Lewis was also placed on probation for two years – No EC license

Maurizio Privitera

Renovation at residence – one site, Toronto

- $3,000.00 fine, plus $750.00 victim surcharge – Proposed to carry out electrical installation by contracting with No EC Licence

Pavel Kotov

Renovations at residence – two sites, Innisfil and Vaughan.

- $3,000.00 fine, $750.00 victim surcharge, on one count and a suspended sentence on a second for operating an electrical contracting business without a valid licence. Received 2 Year Probation Order – No EC licence

Paul Parul

Advertised electrical services while not licensed. He also operated an electrical contracting business without a valid licence, Mississauga.

- $3,000.00 fine, $750.00 victim surcharge, on one count and a suspended sentence on a second with respect to his advertisements.
- $5,000.00 fine, plus $1,250.00 victim surcharge, for operating an electrical contracting business without a valid licence.

Saba Home Inc.

Operated an electrical contracting business without a valid licence, Stouffville.

- $3,000.00 fine, $750.00 victim surcharge – No EC Licence

Convictions (Continued)

Saba Mahdian

Mahdian was the sole officer and director of Saba Home Inc, and he failed to prevent the corporation from operating an electrical contracting business without being the holder of an electrical contractor licence, Stouffville.

- $3,000.00 fine, $750.00 victim surcharge – As Director, failed to prevent the Co (Warren Mechanical) from operating with No EC License

Jacson Tabunot

Tabunot operated an electrical contracting business without a valid licence, conducting renovations at one site, Hamilton.

- $7,500.00 fine, $1,875.00 victim surcharge – No EC Licence

Panagiotis Ververis

Advertised electrical services on Facebook and a website while not licensed, Whitby.

- $3,000.00 fine, $750.00 victim surcharge – Advertising

Jason Wallace

Wallace failed to file notifications for work at two different residential sites, and permitted / employed someone who was not licensed to perform electrical work, Keswick and Barrie.

- $3,000.00 fine, $750.00 victim surcharge – No Notification of Work
- $3,000.00 fine, $750.00 victim surcharge – No Notification of Work.
- $3,000.00 fine, $750.00 victim surcharge – Permit / Employ

1071034 Ontario Limited o/a Mechanical, Plumbing & Heating by Warrens

Operated an electrical contracting business without a valid licence. It also conducted renovations at residence – one site, Niagara-on-the-Lake.

- $3,000.00 fine, $750.00 victim surcharges – Advertising
- $3,000.00 fine, $750.00 victim surcharge – No EC Licence

George Warren, Director of 1071034 Ontario Limited o/a Mechanical, Plumbing & Heating by Warrens

Warren was the sole officer and director of Warren Mechanical, and he failed to prevent the corporation from operating an electrical contracting business without being the holder of an electrical contractor licence, NIagara-on-the-Lake.

- $3,000.00 fine, $750.00 victim surcharge – As Director, failed to prevent the Co (Warren Mechanical) from operating with No EC License

New Meterbase Lead to an Increase in Wiring Defects in Ontario

Recently, ESA noticed an increase in the number of meterbases (meter-mounting devices commercially known as meterbase) that are not connected correctly.

Currently there are different types of meterbases available in the marketplace, which have different neutral assembly configurations. Contractors have been using different models of meterbases for residential services based on availability. Not recognizing the different neutral assembly configurations may result in a non-compliant grounding and bonding of the electrical system. This is a very critical part of the installation and if not done correctly has potential safety hazards.

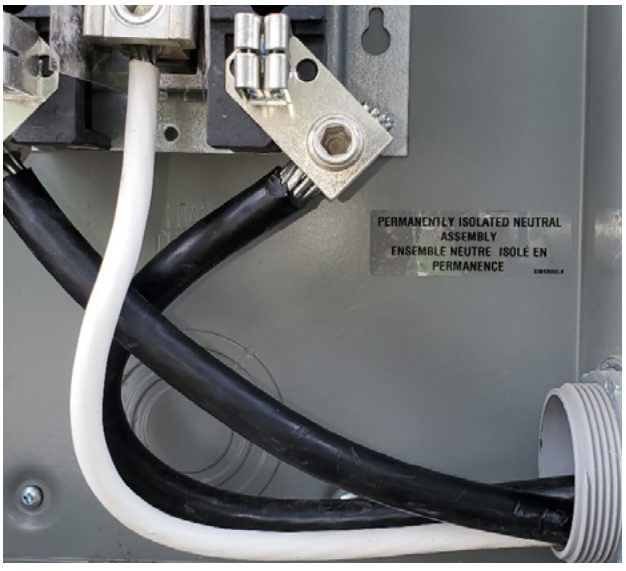
Neutral assemblies of meterbases can be installed at the factory, or be provided as a kit to be field-installed. There are 3 different versions:

1) Permanently bonded to the enclosure;

2) Permanently isolated from the enclosure; or

3) Supplied with means to bond or isolate from the enclosure, complete with marking on a temporary tag, instruction sheet, or equivalent indicating how the bond is to be removed or installed

It is important to check for the appropriate wiring configuration used based on the neutral assembly configuration. For example, a permanently isolated neutral assembly requires a bond conductor to be installed in the service raceway (see OESC Appendix B Figure B-10-4 and Bulletin 10-15-*) to the service box to prevent shock hazards and electrocution.



[TOP] Photo showing a Meterbase with marking of an isolated Neutral assembly and instructions on how to a convert to permanently bonded one

[BOTTOM] Meterbase with the marking of a Permanently isolated neutral assembly

Message from the Director

SOUSSANNA KARAS
Director of Licensing

As many of you know, addressing the Underground Economy (UE) is a critical element of ESA's 2020-2025 Strategic Plan. I would like to use this opportunity to outline ESA's approach to non-compliance.

As a modern regulator, ESA has adopted a risk-based oversight approach to all of its compliance and electrical safety activities. This means that we are committed to directing the right intervention at the right risk. On the Underground Economy, in order to use our resources effectively, we are following the three-pronged risk-based approach of Identify, Educate and Address.

Identify:

In relation to ESA regulated activities, the Underground Economy includes unlicensed contractors as well as licensed contractors and homeowners who deliberately refuse to comply with the Electricity Act and its Regulations (for example, operating an electrical contracting business without a licence, willfully and persistently failing to file a Notification with ESA, etc.).

The estimated gross domestic product (GDP) at market prices for UE activity in Canada across all sectors reached $68.5 billion, or 2.7% of total GDP, in 2021. According to Statistics Canada, in 2021 residential construction accounted for 35% of UE activity[1].

Our stakeholders and inspectors have always been a valuable source of information as we seek to identify those who operate in the underground economy. As the UE continues to grow and evolve, utilizing digital technologies, social media and other platforms, we at ESA are reviewing and refining our initiatives and approaches to identify non-compliant actors in our sector.

Educate:

Education is a powerful tool, both on the supply and demand side, in addressing the UE:

a) to individuals and businesses that are offering services (operating electrical business without licence, counselling home owner to file notification/permit in their name, telling consumer that notification/permit is not required, etc.)

b) to consumers, home and business owners, who are willing to work with unlicensed or forgo ESA inspection.

1 Canada Revenue Agency, *2022+ Underground Economy Strategy*, (https://www.canada.ca/en/revenue-agency/programs/about-canada-revenue-agency-cra/corporate-reports-information/underground-economy-strategy-2022.html).

Message from the Director (Continued)

One recent example of our work in this area is ESA's educational Integrated Compliance campaign, launched this year to help Ontarians understand how hiring an LEC and engaging with ESA keeps their family safe. The objective of the campaign is to increase notifications and divert business away from the UE. You may have heard our radio ads or seen ESA billboards around the GTA.

Address:

With the newly instituted power to issue Administrative Penalties, we have expanded the tools available to address instances of underground economy activity. Where appropriate and proportional, we will continue to use prosecutions as well.

Reducing participation in the UE has been and continues to be, a priority for ESA. One of the activities under this pillar is working with stakeholders and safety partners. To that end, ESA has had a number of constructive discussions with the Ministry of Labour, Immigration and Skills Development to create a protocol for sharing information about the underground economy with the goal to increase awareness and decrease illegal electrical installations and unsafe electrical work.

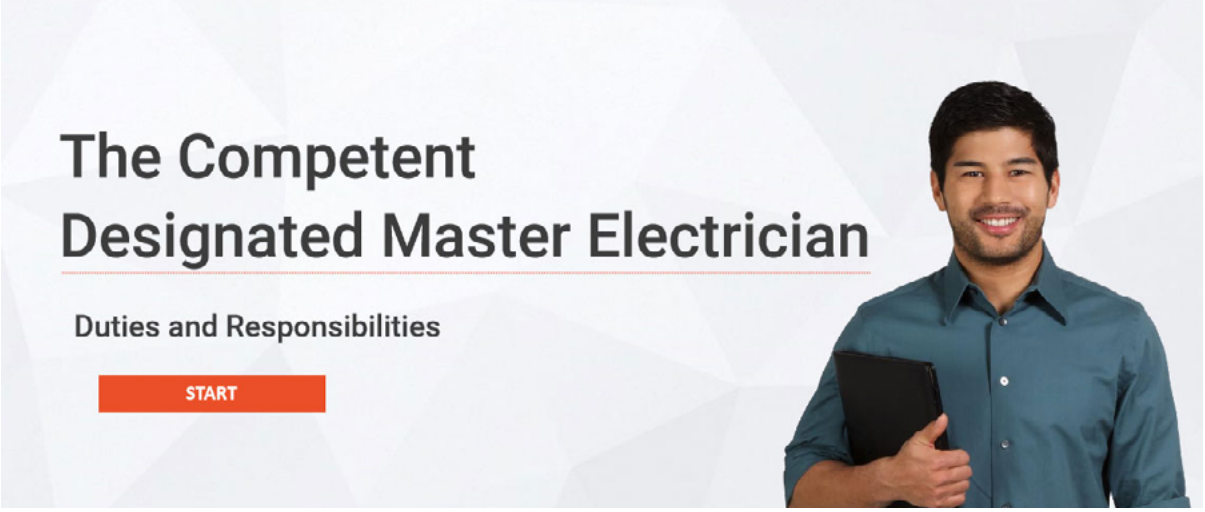
Conclusion:

In collaboration with stakeholders, ESA collects, reviews and identifies trends in the electrical sector with a view to creating UE initiatives using this Identify, Educate, and Address approach. One such initiative is our ongoing partnership with Kijiji through which we review ads for electrical services that fail to provide their ECRA/ESA licence number. These are addressed with our progressive compliance approach. First, we educate the poster on licensing requirements. If the posts continue, we ask Kijiji to remove the post from the platform. If the post appears after forced removal, we escalate to Administrative Monetary Penalties or charges before the Ontario Provincial Court, if a violation of the licensing requirements is confirmed.

Message from the Director (Continued)

The ESAs' goal remains constant: to reduce UE-related non-compliance. In the year ahead, we will continue to Identify, Educate on and Address UE activities by monitoring the environment, addressing new and emerging UE-related risks as they occur, and evaluating and improving how we address UE activities in electricity sector. We need your input and participation to make a difference: please report non-compliant activity via our reporting tool: https://esasafe.com/contractors/report-non-compliance/.

Have You Heard About *The Competent Designated Master Electrician* Module?



Designated Master Electricians (DMEs) play a crucial role in ensuring the safety and compliance of Licensed Electrical Contractor (LEC) businesses. Each DME is responsible for planning and supervising electrical work carried out on behalf of the LEC.

To assist DMEs and LECs in navigating their duties and responsibilities, the Electrical Safety Authority has created *The Competent Designated Master Electrician module*. This 25-minute module presents various scenarios that illustrate real-life situations where DMEs must make decisions to remain compliant with Ontario Regulation 570/05: Licensing of Electrical Contractors and Master Electricians, the Ontario Electrical Safety Code, consumer protection legislation, health and safety laws, employment standards laws, and business practices.

Don't be the last to see what everyone is talking about. You can find the DME module here.

Fees Increase Effective Sept. 18, 2023

The ESA increased wiring and licensing fees by 5%, to respond to inflationary pressures, on Sept.18, 2023. This increase reflects the inflationary pressures and economic headwinds that the ESA, and many organizations, are facing, while continuing to deliver on the ESA's important mandate for sector and public education, and invest in operational efficiencies and the digital strategy. Over the past seven years, wiring fees have faced a fee increase of only 2%, while licensing fees have not increased at all. Effectively, the ESA has managed prudently and absorbed the cumulative inflation costs of over 20% during that seven-year period. While we recognize the burden that fee increases put on our stakeholder community, we will continue to drive public value through our financial and operational performance, and by continuing to find ways, like the new ESA ON App, to drive cost and burden reduction in the sector. To view the updated Wiring Fee Guide click here.

In addition, ESA is seeking input from stakeholders on two fee change proposals. The first proposal would introduce cost recovery fees for deviation applications; the second proposal would increase entertainment fees to reflect the time and effort from inspectors, also in order to achieve cost recovery.

For those who are interested in reviewing the proposals in detail and submitting feedback, please visit ESA's public consultation's website. Feedback is requested before Dec. 21, 2023.

Generator/Transfer Switch Fee

A correction to the fee for Generator with Transfer Switch will be implemented in our systems on Jan. 4, 2024. This is in alignment with the 2023 Wiring Fee Guide, and the system will recognize the appropriate quantity of equipment rather than using the previous default of "1".

The fee when a transfer switch is installed at the same time as the generator, by the same contractor is $79 (NC $86) for the first piece of equipment plus $27 (NC $30) for each additional piece of equipment or device.

Example: Generator + Transfer Switch = $106 (NC $116)

When separate inspections are requested by the same contractor for the transfer switch and generator, the fee shall remain $159 (NC $171).

See Section 4.4.2 of the 2023 Wiring Fee Guide for additional details.

Scheduling of Wiring Inspections coming to the ESA ON Mobile app in 2024

Coming in early 2024, users of ESA's LEC Online Portal will be now be able to schedule wiring inspections using the ESA ON Mobile app.

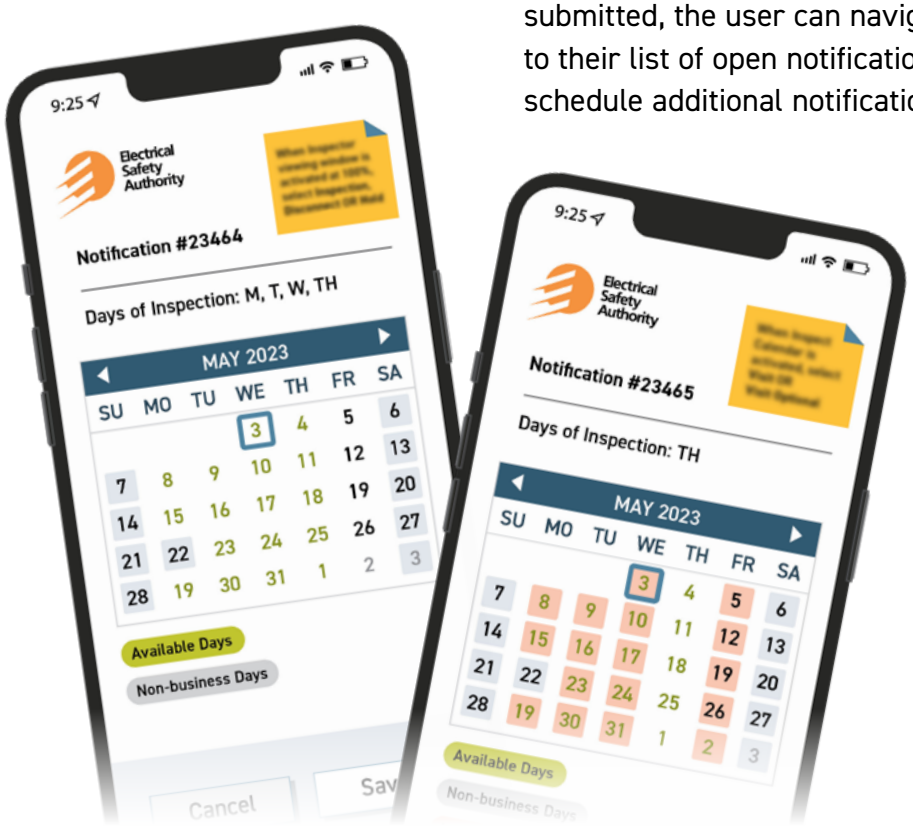
The ESA ON Mobile app was launched in March 2023 and initially provided access to a small group of contractors who had used remote inspections to generate Z1 notifications and upload photos and videos directly onto the app, rather than manually submitting evidence to ESA inspectors using email or text messages.

Following the expansion of this group of contractors using the ESA ON Mobile app for remote inspections, ESA has been developing an additional functionality in the app to allow users to schedule wiring inspections.

This new functionality will allow users to select a notification from their list of open notifications in their ESA account and schedule an inspection. Similar to the functionality in the LEC Online Portal, the user will then be able to select the Type and Status from drop-down lists, as well as flag the requested inspection for Final and add any comments, if necessary.

Using the calendar, users will be able to quickly see which days an ESA inspector is available and which days the inspector is not in the user's area, and schedule inspections accordingly. The appearance of the calendar will vary for the user, depending on the type of inspection requested and the RBO Engine recommendation.

Once a request for inspection has been submitted, the user can navigate back to their list of open notifications and schedule additional notifications.



Scheduling of Wiring Inspections coming to the ESA ON Mobile app in 2024 (Continued)

Just like with the remote inspections function, users will be able to upload photos and videos to their scheduled notifications and provide greater context regarding the scope of each installation. Users will also be able to check the status of their notifications on the app to see if their inspections have been passed.

Integrated with the remote inspections function, this new enhancement will make it simpler than ever to request inspections, directly from your mobile phone or tablet. Contact the ESA Customer Service Centre at esa.cambridge@electricalsafety.on.ca or 1-877-372-7233 to sign up for the ESA ON Mobile app today!.

Key features of this new function include:

- Use your ESA Online Services credentials to log into the app;
- Search for open notifications and view current inspection status and inspector information;
- Schedule notifications for inspection;
- Capture photo and video evidence while on-site and submit evidence to ESA with relevant details for review;
- Offline capability for photo and video capture.

Episode 12 >>>
Piloting Remote Inspections

Learn more about remote inspections, a new inspector mapping tool and how ESA will implement feedback into its initiatives.

LISTEN NOW

Toolbox Talks

Electrical Safety Authority

ESA is pleased to provide LECs and their teams with a monthly one-pager to talk about safety, seasonal reminders, code updates and more! We have heard from many of you on the front lines that you are looking for more information to share and discuss with your teams on things that matter to you – but without having to overload you with information. This digital one-pager will be issued on a monthly basis and can be found here with a new edition being posted regularly! Please find below the links to the first four issues of Toolbox Talks. Toolbox Talks can be found here on the ESA website. If you have any questions, please reach out to esa.communications@electricalsafety.on.ca.

Did you know?

ESA reviews and reports on electrical incidents that occur. We have highlighted two of these incidents below:

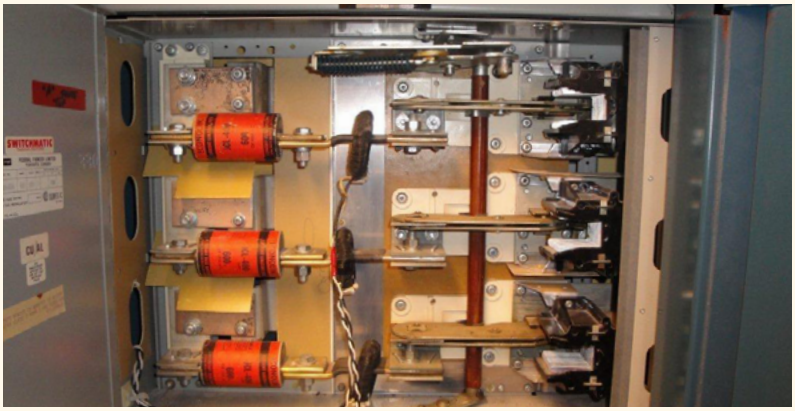
Incident #1 — Faulty Disconnect

SUMMARY:

An electrician suffered severe burns due to an arc flash incident from a faulty disconnect switch. The switch failed when the worker attempted to turn the handle of the switch to the OFF position.

CAUSAL FACTORS:

- Hinge pin was not flared during the manufacturing process
- Electrician was not dressed to Z462 standard requirements for this task.



Toolbox Talks

Electrical Safety Authority

Incident #2 — Switchgear Arc Fault

SUMMARY:

An electrician contractor's three-man crew was replacing switched gear in the main electrical room of a twelve-story condominium building. During preparation, the victim and his co-worked removed the panel covers off the cabinet containing the old switchgear while it was still energized. An arc flash occurred causing burns to the victim.

CAUSAL FACTORS:

- Condominium has never reviewed health and safety policy on any job with the contractor
- Condominium did not review health and safety policy on this job.
- Covers removed off the panel before shutting the power off.
- Appropriate PPE was not worn by the workers on the job.

Exciting Initiatives from ESA Training Solutions: New Course Catalogue and E-mail Communications

Explore Our New Course Catalogue

ESA Training Solutions' courses cover a wide range of topics, from basic electrical safety to specialized technical training. As the landscape of electrical safety constantly evolves, so does the need for ongoing education and training. That's why we are thrilled to announce the launch of our new course catalogue!

Our course catalogue offers an in-depth overview of the safety and technical courses we deliver. Whether you're looking to refresh your knowledge, acquire new skills, or stay up-to-date with the latest regulatory changes, our catalogue has something for you.

Access ESA Training Solutions' course catalogue here. Feel free to download, print, and share this resource.

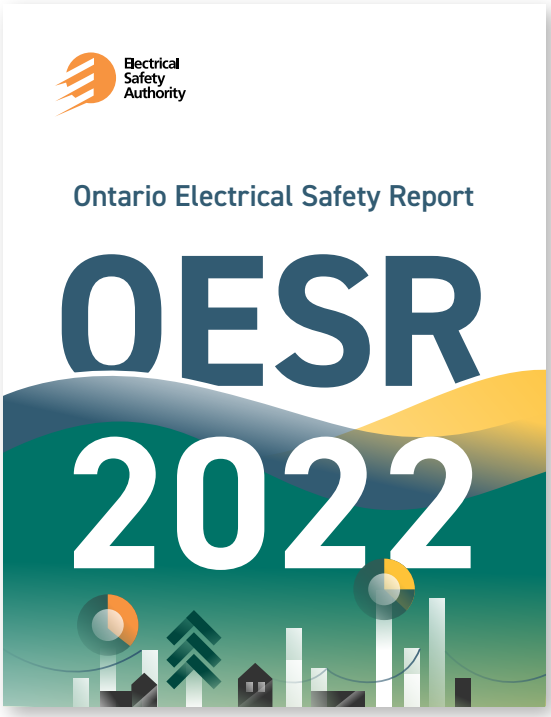
Subscribe to New E-mail Communications

Be the first to know about upcoming course launches, new offerings, discounts, and valuable resources from ESA Training Solutions. To subscribe to our email communications and unlock these benefits, click here.

Training is a non-regulatory service offered by the Electrical Safety Authority (ESA). Electrical safety and technical courses may be offered by other providers. Click here for more information about ESA's non-regulatory activities.

2022 Ontario Electrical Safety Report Now Available

The Electrical Safety Authority's (ESA's) Ontario Electrical Safety Report (OESR) was created to provide a comprehensive perspective of electrical fatalities, injuries, and incidents in Ontario. Data presented in this report come from multiple sources, investigations, and root-cause analyses. Information is provided on potential electrical risks and high-risk sectors. This report is used by the ESA and others to better understand the dynamics of electrical safety and to encourage the development of initiatives to improve the status of electrical safety in the province.



The OESR would not be possible without the collaboration of our safety partners: the Office of the Chief Coroner, Ministry of Labour, Immigration, Training and Skills Development, the Office of the Fire Marshal and Emergency Management, the Canadian Institute of Health Information, and the Workplace Safety and Insurance Board of Ontario.

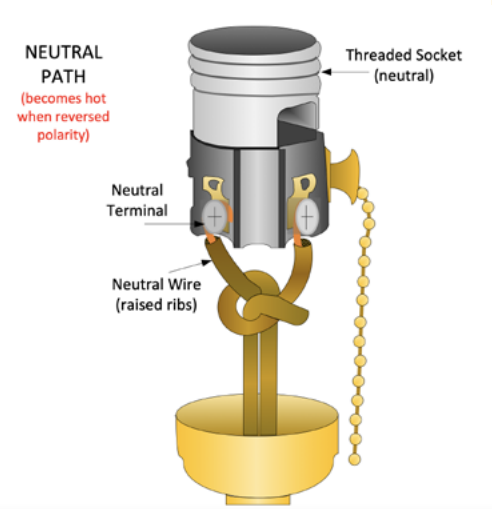
This 22nd report on the state of electrical safety in Ontario summarizes electrical incidents, electrical-related fatalities identified by the Office of the Chief Coroner, and injuries of an electrical nature. It also provides information on deaths, injuries, and damage caused by fire incidents identified by the Office of the Fire Marshal and Emergency Management (OFMEM), as well as fires and fire fatalities identified by local fire departments where electricity was identified as the ignition fuel and/or electrical distribution equipment was identified as the ignition source. The purpose of this report is to provide stakeholders within the broad electrical safety system with an update and a longitudinal perspective of electrical safety in Ontario.

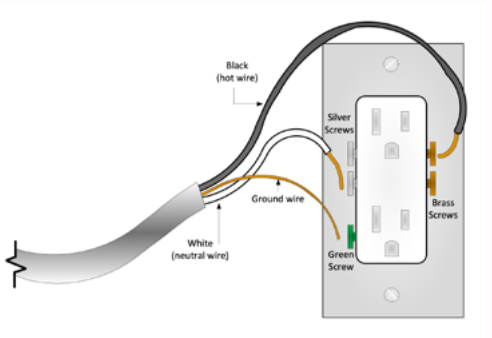
Receptacle Polarity

Rule 26-002 of the Ontario Electrical Safety Code (OESC) requires a device that has an identified terminal or lead to be connected to the identified conductor of the circuit. Applying this to areceptacle, the neutral conductor of the circuit needs to be terminated to the silver screw of the receptacle.

Ensuring correct polarity for receptacles is an important step in preventing a hidden hazard that could lead to electrocution.

Cord caps (plugs) are polarized, so reverse wiring may create a dangerous shock hazard such as the threaded socket of lamp holders. These could become energized even when the switch is in the off position.





CODE CONUNDRUM

Q1

What is the maximum mounting height to the overcurrent device handle of a panelboard in a dwelling unit?

a. 1.5 m

b. 1.6 m

c. 1.7 m

d. 1.8 m

Q2

Conductors for equipotential bonding shall be permitted to be installed as open wiring, provided that they are adequately secured.

a. True

b. False

Q3

The maximum rating for a circuit breaker protecting exposed wiring for permanent outdoor lighting circuit is:

a. 15 A

b. 20 A

c. 30 A

d. 40 A

Answers

Question 1:

c. 1.7 m

Question 2:

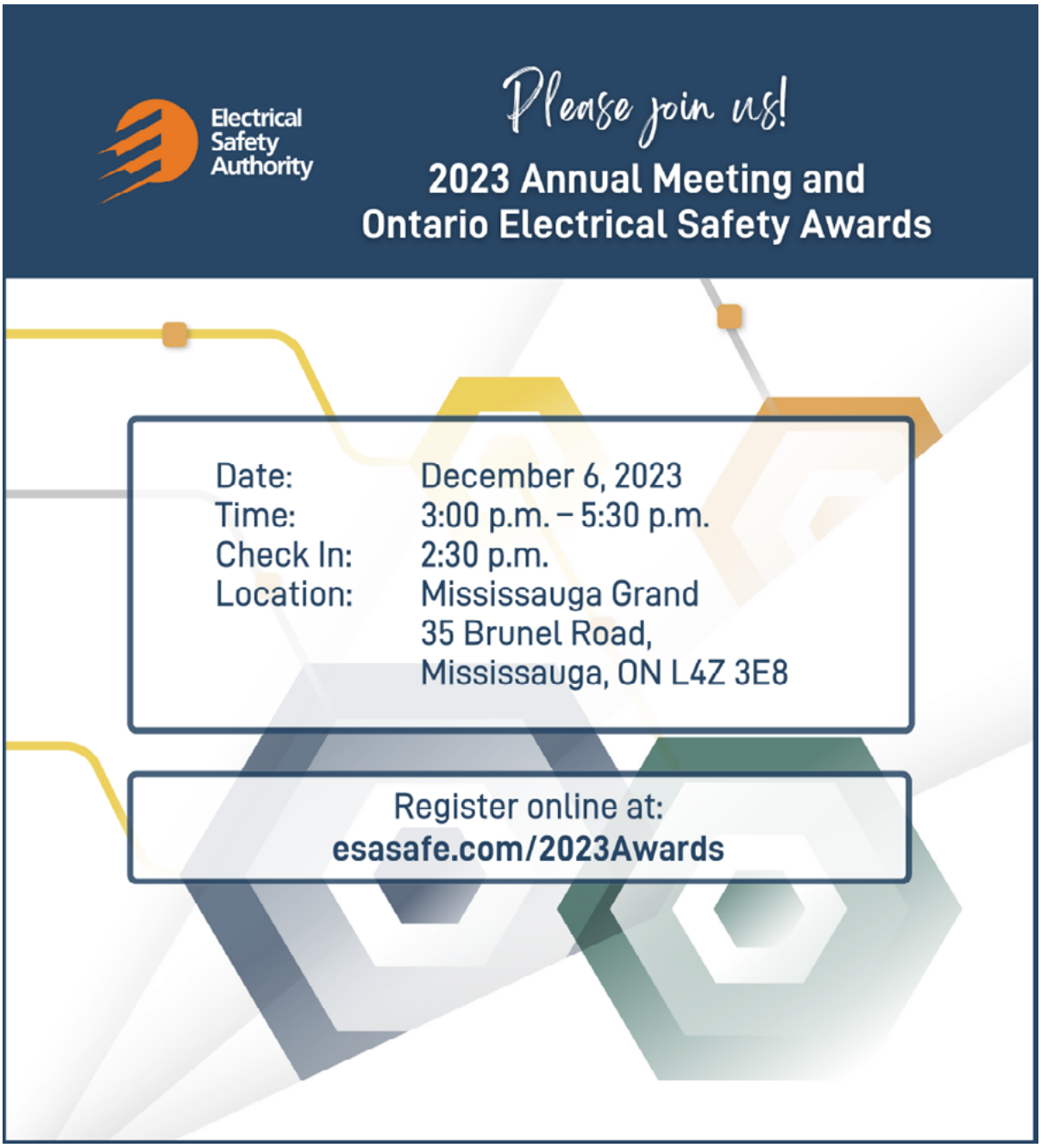
a. True

Ref: Rule 10-702(1)

Question 3:

c. 30 A

Ref: Rule 30-1120(1)


Electrical Safety Authority
Please join us!
2023 Annual Meeting and
Ontario Electrical Safety Awards
Date: December 6, 2023
Time: 3:00 p.m. – 5:30 p.m.
Check In: 2:30 p.m.
Location: Mississauga Grand
35 Brunel Road,
Mississauga, ON L4Z 3E8
Register online at:
esasafe.com/2023Awards