

# CANADIAN ELECTRICITY FORUM TO LAUNCH CSA-Z462 TRAINING

Canadian Electricity Forum is offering Canadian companies an advanced look at Canada's new Arc Flash/Electrical Safety Standard with a series of cross-Canada CSA-Z462 technical courses this September, based partly on NFPA70e and the final Draft Version of CSA Z462.

"This will be the first chance Canadian electrical professionals have to review the actual content of CSA-Z462 and see the differences and additions that have been made to NFPA 70e and how these changes and additions will impact on their electrical work practices. The Canadian Electricity Forum is a recognized provider of continuing education to Canada's electrical industry and serves the educational interests of Canadian electrical workers," said Randolph Hurst, president of The Canadian Electricity Forum.

"For Canadian companies, compliance with CSA-Z462 will not only help to prevent injury to their electrical workers, it will also protect them from potential legal action in the event of an accident investigation. Any investment in electrical safety is a bargain when compared to the cost of a legal defense in provincial court. In addition, if an electrical accident is serious enough to warrant criminal charges, a company may find itself in Canadian Federal court, charged under Bill C51 where it will need to prove it did everything possible to ensure the safety of its workers. The objective of compliance through training and integrating CSA-Z462 is to exercise "due diligence", Mr. Hurst added.

CSA-Z462 sets a new standard for Electrical Safety Training in Canada. Such workers shall be trained to understand the specific hazards associated with electrical energy."

And that electrical workers "shall be trained in safety-related work practices and procedural requirements as necessary to provide protection from the electrical hazards associated with their respective job or task assignments. Workers shall be trained to identify and understand the relationship between electrical hazards and possible injury."

CSA-Z462 also recommends that qualified electrical workers "be trained and knowledgeable of the construction and operation of equipment or a specific work method and be trained to recognize and avoid the electrical hazards that might be present with respect to that equipment or work method. Also, that these workers "shall also be familiar with the proper use of

the special precautionary techniques, personal protective equipment, including arc flash, insulating and shielding materials, and insulated tools and test equipment."

CSA-Z462 clearly states: "Such persons permitted to work within the Limited Approach Boundary of exposed energized electrical conductors and circuit parts operating at 50 volts or more shall, at a minimum, be additionally trained in all of the following:

(i) The skills and techniques necessary to distinguish exposed energized electrical conductors and circuit parts from other parts of electrical equipment

(ii) The skills and techniques necessary to determine the nominal voltage of exposed energized electrical conductors and circuit parts

(iii) The approach distances specified in Table 1 and the corresponding voltages to which the qualified person will be exposed

(iv) The decision-making process necessary to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the task safe-

ly.

(v) A worker who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified person shall be considered to be a qualified person for the performance of those duties.

(vi) Tasks that are performed less often than once per year shall require retraining before the performance of the work practices involved

(vii) Workers shall be trained to select an appropriate voltage detector and shall demonstrate how to use a device to verify the absence of voltage, including interpreting indications provided by the device. The training shall include information that enables the worker to understand all limitations of each specific voltage-detecting device that may be used."

"The Canadian Electricity Forum's Arc Flash/Electrical Safety training course will instruct students in the importance of these skills and how to properly recognize the potential for electrical hazards and how to properly protect themselves from possible arc flash burns and injuries," Mr. Hurst added.

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# CSA-Z462: CANADA'S NEW ARC FLASH STANDARD IS YOUR ELECTRICAL SAFETY PROGRAM READY?

Q&A With Mike Doherty,  
Chairman of The Canadian  
Standards Association's  
(CSA) Z462 Technical  
Committee on Workplace  
Electrical Safety.

ES: What are the general  
areas of difference  
between NFPA 70e  
2004 version and  
NFPA 70e 2009 ver-  
sion?

MD: Chapter 4 has been  
completely deleted. As well  
there have been many, many  
improvements and clarifica-  
tions. Task Tables have been  
updated and improved. It will  
be one of the most significant  
upgrades in the cycles of  
NFPA 70E.

ES: Why is there a CSA  
Z462?

MD: There was a need expressed by differ-  
ent stakeholders across Canada to have a  
Standard that was more suited to the  
Canadian workplace in regards to refer-  
encing applicable Canadian Standards,  
etc.

ES: What are the main areas of difference  
between CSA Z462 and NFPA 70e?

MD: Basically as follows:

- a) CSA formatting and style guide will give  
CSA Z462 a different look and feel than  
70E.;
- b) Article 120 on Lockout (OSHA) in 70E  
will be replaced by Clause 4.2 (Establishing  
an Electrically Safe Work Condition) in CSA  
Z462 based on CSA Z460 (Control of  
Hazardous Energy - Lockout & Other  
Methods);
- c) 5 new Annexes (for information only)  
added to CSA Z462 that will not be in 70E.;
- d) Many references to Canadian Standards

## CSA Z462 Arc Flash/Electrical Safety Forum 1-Day Course Dates

January 18, 2010 - Richmond, BC  
January 19, 2010 - Kamloops, BC  
January 20, 2010 - Edmonton, AB  
January 21, 2010 - Calgary, AB  
January 22, 2010 - Saskatoon, SK  
January 25, 2010 - Winnipeg, MB  
January 25, 2010 - Toronto, ON  
January 27, 2010 - Ottawa, ON

## Arc Flash/High Voltage Electrical Safety Training 2-Day Course Dates

January 19-20, 2010 - Richmond, BC  
January 21-22, 2010 - Edmonton, AB  
January 26-27, 2010 - Toronto, ON  
January 28-29, 2010 - Ottawa, ON

## Combined CSA Z462 Arc Flash Awareness AND Arc Flash/High Voltage Electrical Safety Training 3-Day Course Dates

January 18-20, 2010 - Richmond, BC  
January 20-22, 2010 - Edmonton, AB  
January 25-27, 2010 - Toronto, ON  
January 27-29, 2010 - Ottawa, ON



[www.electricityforum.com/forums/one-day-csa-z462.html](http://www.electricityforum.com/forums/one-day-csa-z462.html)

[www.electricityforum.com/forums/high-voltage-electrical-safety.html](http://www.electricityforum.com/forums/high-voltage-electrical-safety.html)

[www.electricityforum.com/forums/electrical-safety-january-2009.html](http://www.electricityforum.com/forums/electrical-safety-january-2009.html)

are now included in CSA Z462;

e) The CEC will be referenced in CSA  
Z462.

ES: What will the impact of CSA Z462  
be on Canadian electrical workers  
and their work practices?

MD: An increased awareness of the impor-  
tance and rigor required for "Electrical Safe  
Work Practices" in Canada. It will be  
heightened and strengthened for those that  
have been using 70E and may in fact be  
something new for those that weren't using  
70E.

ES: Will CSA Z462 become "law" in  
Canada. Many companies are con-  
fused about what CSA Z462 will  
mean to them.

MD: CSA Z462 is clearly a "national volun-  
tary standard of Canada". Regulators in  
individual provinces will decide how to

apply it across their jurisdictions as time  
progresses. Legislation is the "shall", CSA  
Z462 is really the "how". Due diligence and  
best case practices are the expectations for  
companies who perform electrical work.  
CSA Z462 offers a comprehensive "tem-  
plate" to accomplish that.

ES: Why should companies who have  
already been trained on NFPA70e  
also receive training on CSA Z462??  
What will they learn that is new?

MD: They will receive all of the new NFPA  
70E - 2009 changes which are substantial  
and impactful. Even without Z462 it would  
be critical to get this information. Z462  
will impart the Canadian standards and refer-  
ences required to fully implement leading  
edge and comprehensive "Electrical Safe  
Work Practices" in a neat, organized and  
important package within the concepts of  
Canadian culture.