

ARC FLASH AND SHOCK WORKPLACE ELECTRICAL SAFETY TRAINING

Sept 11, 2018 - Toronto, ON

Sept 12, 2018 - Ottawa, ON

Sept 17, 2018 - Winnipeg, MB

Sept 18, 2018 - Saskatoon, SK

Sept 24, 2018 - Edmonton, AB

Sept 25, 2018 - Calgary, AB

Sept 26, 2018 - Richmond, BC

Oct 2, 2018 - Halifax, NS



1-DAY COURSE
\$399

WHY INSTRUCTOR- LED TRAINING IS BETTER:

**GROUP EXERCISES, CLASS DISCUSSION,
PHYSICAL PPE DEMONSTRATIONS, POST-
CLASS TESTING AND ARC FLASH CERTIFICATE**

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EARN CONTINUING
EDUCATION UNITS (CEUS)

COMPLETE COURSE DETAILS AT

WWW.ELECTRICITYFORUM.COM/ELECTRICAL-TRAINING/ARC-FLASH-TRAINING

The Arc Flash and Shock Safety Training Course Includes:

- 100+Page Digital Electrical Safety Handbook (Value \$20)
- An Electricity Forum Coupon (Value \$100) to be used against any future 2018 Electricity Forum event (restrictions apply)
- 0.7 CEU credits issued by the Engineering Institute of Canada.
- Forum Presentations in Paper Format
- A FREE Magazine Subscription (Value \$50)
- NOTE: This course DOES NOT INCLUDE A CSA Z462-18 Standard. Copies of the CSA Z462-18 Standard must be purchased separately from Canadian Standards Association and brought to the course.

THIS 1-DAY - INSTRUCTOR-LED, CERTIFIED ARC FLASH AND SHOCK TRAINING COURSE INCORPORATES RECENT REVISIONS TO THE 2018 EDITION OF CSA Z-462 ARC FLASH ELECTRICAL SAFETY IN THE WORKPLACE STANDARD.

CSA Z-462 2018 Edition As of January 2018 - Important Changes That You Should Know About.

Make sure you are aware and compliant with the many changes to the NEW 2018 CSA Z462 Arc Flash/Electrical Safety Standard, which came into effect in January 2018.

Our popular one-day CSA Z462 Arc Flash Training course

is designed for front-line workers who are responsible for electrical systems and needing certification in the CSA Z462 electrical safety standard. This standard covers safe work practices related to electrical dangers in the workplace. Students will gain a solid understanding of hazards encountered while operating or maintaining electrical installations in the low voltage (below 750V) class including a full understanding of the arc hazard categorization, appropriate PPE selection and safe electrical work procedures.

This one-day Instructor-led Arc Flash Training course is much more educational experience than taking an online training course or watching an online video!!

AGENDA - DAY 1

UNDERSTANDING ELECTRIC POWER SYSTEMS

- Time-Current Curves & Power System Studies
- Electrical Arc Characteristics

PREPARING TO WORK SAFELY

- Hazard Risk Analysis/ Task Assessment
- Assessment To Lockout Or Work Energized
- Overview Of Lockout Fundamentals
- Working Energized Defined
- Preparing A Job Briefing And Planning Checklist
- How To Plan For An Energized Electrical Work Permit
- Elements Of An Energized Electrical Work Permit

ELECTRICAL HAZARDS

- Electrical Shock
- Effects Of Current On Human Beings
- Shock Protection Boundaries
- Approach To Energized Electrical Conductors Or Circuit Parts Operating At 50 Volts Or More
- Arc Flash/ Arc Blast
- Elements And Characteristics Of An Arc Flash Event
- Arc Flash Hazard Analysis
- Arc Flash Protection Boundary For Voltages Between 50 And 600 Volts

ESTABLISHING AN ELECTRICALLY SAFE WORK CONDITION

- The most effective way to prevent electrical injury is to completely remove the source of supply. This section will discuss the methods and process of achieving an electrically safe work condition. Including the following:
- Working On or Near De-energized Electrical conductors or Circuit Parts That Have Lockout Devices Applied

Principles Of Lockout Tagout Execution

- A. Employee Involvement
- B. Training
- C. Plan
- D. Control Of Energy

E. Identification

F. Voltage

G. Coordination

Hazardous Electrical Energy Control Procedures

- A. Individual Qualified Employee Control Procedure
- B. Simple Lockout Tagout Procedure
- C. Complex Lockout Tagout Procedure
- D. Coordination
- E. Training And Retraining

Equipment

- A. Lock Application
- B. Lockout Tagout Device
- C. Lock Out Device
- D. Tagout Device
- E. Electrical Circuit Interlocks
- F. Control Devices
- G. Procedures
- H. Planning

DETERMINING SAFE APPROACH DISTANCE

- Determining Safe Approach Distance
- Definitions Of Boundaries And Spaces
- Limits Of Approach
- Shock Hazard Analysis
- Shock Protection Boundaries
- Limited Approach Boundary
- Restricted Approach Boundary
- Prohibited Approach Boundary
- Hazard Boundary

Shock Hazard Boundaries

- Limits Of Approach
- Preparation For Approach
- Qualified Persons, Safe Approach Distance
- Electrical Conductors Or Circuit Parts For Shock Protection
- Safe Working Distances From Energized Conductors

complete course details:

www.electricityforum.com/electrical-training/arc-flash-training

BASIC METHOD FOR DETERMINING ARC FLASH HAZARD ASSESSMENT

- Breakdown And Characteristics Of The 4 Hazard Risk Categories - NEW
- Selection Of Personal Protective Equipment For Various Tasks
- Hazard/ Risk Category Classification
- Protective Clothing And Personal Protective Equipment (PPE)
- Protective Clothing Characteristics
- Factors In Selection Of Protective Clothing And Equipment
- Two Category, Flame Resistant (HRC/ Hazard Risk Category) Clothing System - NEW
- Layering Protective Clothing And Total System Arc Rating
- Arc Rating, Arc Thermal Performance Value (ATPV) And Break-Open Threshold Energy (EBT)
- Brief Overview Of Applicable ASTM Standards For Protective Clothing And PPE

Safety-related Electrical Maintenance

- Introduction
- Frequency Of Maintenance Tests
- Maintaining Electrical Drawings
- Maintenance Standards

Electrical Hazard Labels, Arc Flash and Shock Labelling

- General
- Canadian Electrical Code Rule 2-306 Shock And Arc Flash Warning Label
- Arc Flash Label Example
- Detailed Arc Flash Hazard Analysis Label - NEW

NEW ANNEX: Prevention of Shock Injuries from Electrostatic Discharges

Prevention of Shock Injuries from Electrostatic Discharges, describes workplace scenarios, such as high-speed network operations, in which potential for shock injury from electrostatic discharge exists. This Annex identifies methods to prevent, control, and protect personnel from injury.

NEW: DC Safety-related Work Practices

- The latest edition of Z462 has considerably more information on safety-related practices relating to work on and around DC systems. A new Shock Protection Boundary Table for DC systems and an arc flash energy calculation method for DC systems have been added. Extensive revisions have been made to deal with safety-related practices for batteries, battery rooms and battery enclosures. Both high value for anyone working on or around DC equipment. This new additional information is essential for working on DC systems.

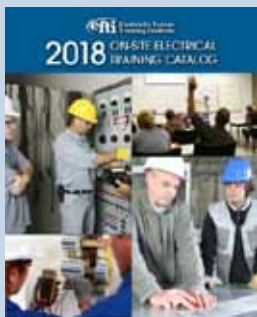
ARC FLASH SOLUTIONS

- Arc Flash Study Analysis And Implementation
- Power System Upgrades
- Arc Resistant Switchgear
- Circuit Breaker Retrofitting
- Remote Breaker Racking
- Regular Maintenance And Testing
- Arc Rated Power Switchgear
- Light Sensing Trip Breakers
- GE Arc Vault Protection System

CSA Z462 PPE CLOTHING REQUIREMENTS, Arc Rated CLOTHING TESTING STANDARDS, HOW TO ESTABLISH A PPE PROGRAM IN YOUR COMPANY

- The Evolution Of Arc Resistant (AR Or HRC) Fabrics
- Changes In Clothing Requirements In Electrical Work - New
- The Various Types Of HRC Fabrics That Are Available In The Marketplace
- HRC Fabrics And The Effects Of Undergarments
- Review The Technology And Effectiveness Of Inherently Flame Resistant Fibers Vs Chemically Treated Fabrics
- Developing A PPE Program In Your Company
- Assessing The Correct Arc Flash Hazard And Choosing The Right Level Of Protective Clothing
- Company Training And Worker Compliance
- Documentation QUIZ
- A Quiz To Ensure Student Understanding Of The Days Information

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WAYS TO REGISTER



1 (855) 824-6131
(905) 686-1040



ON-LINE:

www.electricityforum.com/electrical-training/arc-flash-training

The fee includes Course presentation materials, refreshments, Lunch is included with this course.

NOTE: This course DOES NOT INCLUDE A CSA Z462-18 Standard. Copies of the CSA Z462-18 Standard must be purchased separately from Canadian Standards Association and brought to the course.

The registration fee to attend the 1-Day Arc Flash and Shock Electrical Safety Training Workshop is \$399.00 + Tax.

Register and prepay 14 days before forum date and receive an early bird discount of \$50.00

SPECIAL PROMOTION: Register 3 delegates at the full price of \$399 each, and get a 4th registration FREE!

* Note: The Electricity Forum is an independent provider of electrical safety training and is a Corporate Supporter of the CSA. All trademarks and copyright associated with the [CSA Z462-15 Arc Flash Standard] are the intellectual property of the Canadian Standards Association and the Electricity Forum claims no ownership of rights thereto.

CANCELLATION AND REFUND POLICY

Registration fees are refundable only upon receipt of written notification 10 days prior to the conference date, less a 10 per cent service charge. Substitution of participants is permissible. The Electricity Forum reserves the right to cancel any conference it deems necessary and will, in such event, make a full refund of the registration fees.

WHEN & WHERE

Mississauga, ON

Sept 11, 2018

Hampton Inn and Suites
3279 Caroga Drive, Mississauga, ON
Tel: 905-671-4730

Ottawa, ON

Sept 12, 2018

Radisson Hotel Ottawa Parliament Hill
402 Queen Street
Ottawa, ON
Tel: 613-236-1133

Winnipeg, MB

Sept 17, 2018

Sandman Hotel & Suites
1750 Sargent Ave.
Tel: 204-775-7263

Saskatoon, SK

Sept 18, 2018

Sandman Airport Hotel
310 Circle Drive
Tel: 306-477-4844

Edmonton, AB

Sept 24, 2018

Sawridge Inn Edmonton South
4235 Gateway Blvd NW
Tel: 780-438-1222

Calgary, AB

Sept 25, 2018

Holiday Inn Calgary Airport
1250 McKinnon Drive
Calgary, AB
403-230-1999

Richmond, BC

Sept 26, 2018

Sandman Signature Vancouver Hotel & Resort
10251 ST. Edwards Drive
Tel: 604-278-9611

Halifax, NS

Oct 2, 2018

Four Points By Sheraton Halifax
1496 Hollis Street
Tel: 902-423-4444

complete course details:

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