

Low Voltage Qualified – Refresher

4-Hour Course

PREREQUISITE Completion of e-Hazard *Low Voltage Qualified* 8-hour course

OVERVIEW This class keeps attendees current on the information gained in the standard Low Voltage Qualified class. In addition to a review of standard electrical safety principles, attendees are brought up to date on the changes in the latest edition of the *NFPA 70E Standard for Electrical Safety in the Workplace*, which is revised every three-years.

REFERENCES *Current NFPA 70E Standard, OSHA Regulations (as applicable)*

MATERIALS *e-Hazard Low Voltage Qualified Refresher Workbook*

1. **Electrical Safety Facts/Risks**
2. **Electrical Related Government Regulations & Standards**
 - Applicable: NFPA 70E/OSHA
 - How Standards Are Used
 - Key Definitions/Issues
3. **Shock Hazards & Protection Strategies**
 - Understanding Shock
 - Variables Impacting Hazard
 - Protection Boundaries
 - Voltage Rated Gloves and Other Shock PPE
 - Rated Insulated Tools and Other Equipment
4. **Arc Flash Hazards & Protection Strategies**
 - Causes/Types
 - Arc Blast
 - Mitigating Hazard through Engineering Design and Work Methods
 - Arc Flash Boundaries
 - Practical Application
5. **Arc Rated Personal Protective Equipment**
 - Overview
 - Protecting Head, Hands and Feet
 - PPE Programs: Categories, Levels, Systems
 - Environmental Considerations
 - PPE Guidelines and Maintenance
6. **Job Planning**
 - Elements of Safety Planning
 - Job Briefing
 - Energized Electrical Work Permit
7. **Risk Assessment**
 - Components of Assessment
 - Methods: Tables or Incident Energy Calculations
 - Labeling
 - Steps to Identify Boundaries/PPE
8. **Safety Related Work Practices**
 - Defining “Electrically Safe Work Condition”
 - Identifying and Securing Boundaries
 - Tools and Equipment
 - Best Practices for Lock Out/Tag Out, Verifying De-energization
 - Situational Conditions (Overhead, Underground, etc.)
 - Special Equipment
 - Training
 - Administrative Guidelines
 - Recognizing Hazards and Poor Work Practices