

COURSE OUTLINE

Low Voltage Qualified – Refresher

4-Hour Course

PREREQUISITE	Completion of e-Hazard <i>Low Voltage Qualified</i> 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 <i>NFPA 70E Standard for Electrical Safety in the Workplace</i> , which is revised every three years.
REFERENCES	<i>Current NFPA 70E Standard, OSHA Regulations (as applicable)</i>
MATERIALS	e-Hazard <u><i>Low Voltage Qualified Refresher Workbook</i></u>

Times are approximate;

Example: 8:00 a.m. – 12:30 p.m. (4.5-hour session)

3 – 10-minute breaks

Example

8:00	:10	Introduction 1. Electrical Safety Facts/Risks			
	:40	2. Electrical Related Regulations & Standards <ul style="list-style-type: none"> • Applicable: NFPA 70E/OSHA • How Standards Are Used • Key Definitions/Issues • NFPA 70E Video (:23) <i>(may move to end)</i> 		:10	6. Job Planning <ul style="list-style-type: none"> • Elements of Safety Planning • Job Briefing • Energized Electrical Work Permit
8:50	:10	BREAK			
9:00	:30	Electrical Hazards & Protection Strategies 3. Shock Hazards & Protection Strategies <ul style="list-style-type: none"> • Understanding Shock • Variables Impacting Hazard • Protection Boundaries • Voltage Rated Gloves and Other Shock PPE • Rated Insulated Tools and Other Equipment 		:30	7. Risk Assessment <ul style="list-style-type: none"> • Components of Assessment • Methods: Tables or Incident Energy Calculations • Labeling • Steps to Determine PPE Required Example
	:30	4. Arc Flash Hazards & Protection Strategies <ul style="list-style-type: none"> • Causes/Types • Arc Blast • Mitigating Hazard through Engineering Design and Work Methods • Arc Flash Boundaries • Practical Application 		11:20 11:30	BREAK
10:00	:10	BREAK			
10:10	:40	5. Arc Rated Personal Protective Equipment <ul style="list-style-type: none"> • Overview • Protecting Head, Hands and Feet • PPE Programs: Categories, Levels, Systems • Environmental Considerations • PPE Guidelines and Maintenance 		:40	8. Safety Related Work Practices <ul style="list-style-type: none"> • Defining “Electrically Safe Work Condition” • Identifying and Securing Boundaries • Tools and Equipment • Best Practices for Lock Out/Tag Out, Verifying De-energization and LV Grounding • Situational Conditions (Overhead, Underground, etc.) • Special Equipment • Training • Administrative Guidelines • Recognizing Hazards and Poor Work Practices
12:30	:20	END			