

GROUNDING AND BONDING OF ELECTRICAL SYSTEMS

Learn strong grounding and bonding fundamentals and performance requirements essential for electrical installation, design and inspection, while maintaining the highest level of electrical safety for persons and property.

Learn about grounding requirements as they relate to Article 250 and other articles of the National Electrical Code® (NEC). Installation, testing and inspection procedures for industrial, commercial, institutional and residential power systems are covered. Learn the rules to minimize the risk of electricity as a source of electric shock, and as an ignition source of fires and explosions.

From the beginning the use of electricity has presented many challenges ranging from how to install a safe electrical system to how to develop minimum code requirements for safe electrical installations. These installations depend on several minimum requirements, many of which are covered in NFPA 70. Learn protection fundamentals and performance requirements that are essential for electrical installation, design and inspection.

CLASS FORMAT:

Classroom

STANDARD CLASS SIZE:

For the best results, NTT recommends a class of not more than 35 participants.

NTT PROVIDES:

- 2-days (16 contact hours) of on-site instruction
- Textbooks
- Classroom consumables
- Completion certificates
- Shipping and instructor travel logistics

CLIENT PROVIDES:

- Classroom of 500 square feet or greater
- Projection screen, white board and/or flip chart(s)



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COURSE AGENDA

FUNDAMENTALS OF GROUNDING AND BONDING	GROUNDING SEPARATELY DERIVED SYSTEMS
WHEN TO GROUND	GROUNDING AT (FEEDER SUPPLIED) SEPARATE STRUCTURES
GROUNDING OF ELECTRICAL SYSTEMS	GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION
GROUNDING ELECTRICAL SERVICES	GROUND-FAULT PROTECTION FOR EQUIPMENT
SERVICE EQUIPMENT AND MAN BONDING JUMPERS	GROUNDING AND BONDING FOR SPECIAL LOCATIONS
GROUNDING ELECTRODES AND AN ELECTRODE SYSTEM	LOW-VOLTAGE AND INTERSYSTEM GROUNDING AND BONDING
GROUNDING ELECTRODE CONDUCTORS	GROUNDING AND BONDING FOR OVER 600-VOLT SYSTEMS
BONDING ENCLOSURES AND EQUIPMENT	TABLES AND EXAMPLES
EQUIPMENT GROUNDING CONDUCTORS	BASIC DISCUSSION OF A POWER-QUALITY SYSTEM
ENCLOSURE AND EQUIPMENT GROUNDING	
CLEARING GROUND FAULTS AND SHORT CIRCUITS	