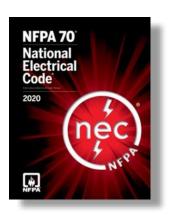


NFPA 70 (NEC) w/Grounding and Bonding of Electrical Systems.

Overview:

One of the most confusing and perhaps misunderstood areas of the trade continues to be bonding and grounding. This class provides the NFPA 70 NEC 2020 codebook that belongs in the hands of every Electrician, Inspector, and Engineer who needs to understand the seemingly conflicting information of how to properly apply the NEC rules of bonding and grounding. Our instructor's ability to explain these rules and their practical application in real-world settings will help you to fully understand how to apply the NEC to Grounding and Bonding every day.



Course Outline:

NOTE: This class contains a lot of material. It is our desire to have a pre-class call to determine content and structure of the class so that your goals and objectives will be met.

Section 1

A. Electrical Safety and Electrical Fundamentals Review, Circuit Protective Devices

Section 2

A. NEC Rules for Grounding and Bonding

Chapter 1

1. General Rules and Requirements for Grounding and Bonding

Chapter 2

- 1. Wiring and Protection
 - a. Earth Shells
 - b. Objectionable Current
 - c. System G & B
 - d. Grounding Electrode Systems and Grounding Conductors
 - e. Enclosures Raceway, and Service Cable Connections
 - f. Bonding for Fault Current
 - g. Equipment Grounding

Chapter 3.

- 1. Wiring Methods and Materials
 - a. Requirements for Wiring Methods
 - b. Outlet, Device, Pull, Junction Boxes, Conduit Bodies, Handhole Enclosures
 - c. Cable Types, Conduit Raceways and Trays

Chapter 4.

- 1. Equipment for General Use
 - a. Switches
 - b. Receptacles and Caps
 - c. Switchboards and Panels
 - d. Luminaries
 - e. AC and Refrigeration Equipment



Equipment Bonding
250.4(A)(3)

Source

Meter Main

Panel

Current Path

Metal parts of electrical raceways, cables, enclosures, and equipment must be connected to the supply source to establish an effective ground-fault current path.

Chapter 5.

- 1. Special Occupancies
 - a. Hazardous Locations
 - b. Class II Hazardous Locations
 - c. Personal Protective Equipment

Chapter 6.

- 1. Special Equipment
 - a. Outdoor Lighting
 - b. IT Equipment
 - c. Solar

- Electrical tools and devices employees may have questions or concerns about
- Field trips are always encouraged and welcomed by our instructors who will answer questions about switch-gear, MCC's, breakers, and other equipment.

Course Objective and Completion: This instructor

led lecture-based course uses instructors that come from the industry and have lived the life of a Qualified Electrical Worker. This course is vital in fulfilling the OSHA compliance and safety procedures required by employers and employees tasked with understanding, identifying and addressing electrical safety.

Upon completion of this course each student who attends will receive the Understanding Grounding and Bonding Text Mike Holt. Certificate of Completion as well as TradeTechPro hat to show off their achievement of excellence.

Post Assessment

Make your training Hands On!

Our instructors are very well versed in all equipment and aspects of electrical safety. Enhance your employees experience by providing the following items in the classroom for additional validation and verification of knowledge.

- Meters used by employees
- Typical and current electrical PPE used

for validation and inspection

