

Agenda

Presented by *Larren K. Elliott, PhD*

- 2020 National Electrical Code: Overview of Major Changes**
- Exterior emergency disconnects
 - Marinas and boatyards
 - Conducting load calculations
 - New general requirement
 - De-energizing panel boards
 - Power over Ethernet
 - Reorganization of Article 310
 - Texas adoption and amendment

- Chapter 1: National Electrical Code**
- Requirements for electrical installations, including clearances and free space requirements about equipment

- Chapter 2: Wiring and Protection**
- Grounded conductors
 - Branch circuit, feeder and services calculations
 - GFCI receptacle outlet requirements
 - Transformer protection
 - Voltage drop calculations
 - Service requirements

- Grounding and Bonding**
- Grounding of service entrances
 - Grounding electrodes
 - Sizing of grounding electrode and grounding conductor
 - Bonding of services
 - Grounding of separately-derived systems

- Chapter 3: Wiring Methods and Materials**
- Wiring methods—underground installation requirements
 - Conductors for general wiring
 - Conductor ampacity correction and adjustments
 - Number of conductors in a raceway
 - Pull and junction box fill calculation

- Chapter 4: Equipment for General Use**
- Flexible cords and cables
 - Switchboards and panel boards
 - Luminaires, appliances, transformers and motors
 - Receptacle requirements
 - Short circuit rating

- Chapter 5: Special Occupancies**
- Hazardous locations
 - Health care facility requirements
 - Commercial garages
 - Recreational vehicle parks

- Chapter 6: Special Equipment**
- Signs, outline lighting, elevators
 - Data center requirements
 - Solar photovoltaic systems
 - Hybrid vehicle plug in requirements
 - Pools and spas
 - Small wind turbine systems

- Chapter 7: Special Conditions**
- Emergency systems
 - Fire alarm circuits
 - Class 1, 2, and 3 power-limited circuits

- Chapter 8: Communications Circuits**
- Premises-powered broadband communication systems
 - Network-powered broadband communication systems

- Chapter 9: Tables**
- Conductor fill and raceway calculation example

National Electrical Code 2020 with Recommended Amendments of the North Central Texas Council of Governments
Live, Interactive Webinar - Monday, March 28, 2022

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Learning Objectives

You'll be able to:

Discuss major changes in the 2020 National Electrical Code.

Explore recommended code amendments from the North Central Texas Council of Governments.

Comply with provisions on wiring and protection.

Meet requirements for grounding and bonding.

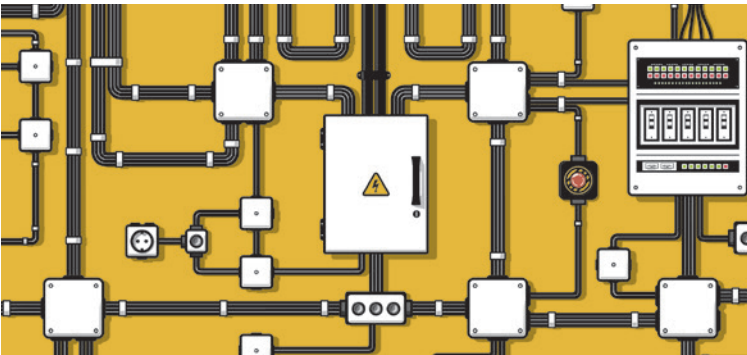
Identify provisions that regulate equipment for general use.

Discuss special occupancies, special equipment and special conditions.



HalfMoon Education Live Webinars National Electrical Code 2020 with Recommended Amendments of the North Central Texas Council of Governments

Live, Interactive Webinar - Monday, March 28, 2022



Learn about the changes in the 2020 Electrical Code

Understand and apply recommended amendments

Comply with rules on grounding and bonding

Discuss wiring methods and materials

Understand premises and network powered broadband communication systems

Continuing Education Credits

Professional Engineers

7.0 PDHs

International Code Council

Pending

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7.0 HSW CEPHs/CE Hours

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Faculty

Larren K. Elliott, PhD *President, Training Technology*
Mr. Elliott started his career in the late 1960s as an electrician. From that he moved to designing electrical control circuits on material handling systems for the Webb Stiles Company. He later became the supervisor of curriculum and instruction for all industrial control products at the Allen-Bradley Company. Mr. Elliott has also been an assistant professor at Texas A&M University teaching Industrial Electricity and Factory Automation within the School of Engineering. Over the years he has received a B.S. degree in Education from West Virginia University and M.B.A. and Ph.D. degrees from Texas A&M University. He has also passed his Electrical Inspector's Exam certified by the International Association of Electrical Inspectors (IAEI). Mr. Elliott's 45 years of practical hands-on industrial and training experience has given him the ability to teach diverse technical subjects to plant and machine operators, technicians, and engineers.

Webinar Information

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Patent Law for Engineers
- Mon, Feb 28, 2022 | 8:30 am - 4:00 pm CST

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- Tues, Mar 1, 2022 | 8:30 am - 5:00 pm CST

Shallow Foundation Design
- Thurs, Mar 3, 2022 | 11:00 am - 2:15 pm CST
- Fri, Mar 4, 2022 | 11:00 am - 2:15 pm CST

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- Mon, Mar 7, 2022 | 9:30 am - 4:30 pm CST

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- Wed, Mar 9, 2022 | 8:00 am - 4:00 pm CST

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