RV-11549 - 2020 NEC® Changes: Special Equipment

Contact Hours: 1

This course covers the changes in Articles 600 through 695 of the National Electrical Code®, other than Articles 690 and 691 (PV systems). Notable changes include increasing the requirement for selective coordination for elevators; multiple changes addressing electric vehicles used as a power source; further restrictions on underfloor wiring in ITE rooms; listing, inspection, and GFCI protection requirements for pools and bodies of water, and reduced protection requirements for fire pump wiring.

Course Objectives:

By the end of this course, you will be able to:

- Define host sign, retrofit kit general use, retrofit kit science specific, and subassembly
- Recall the instances in which overcurrent devices for elevators must be selectively coordinated
- Describe the listing, inspection, and GFCI protection requirements for pools and bodies of water
- Recall GFPE settings given various instances Identify the cords, conductors, and cables that are allowed in under floor spaces of IT equipment rooms
- Discuss the reduced protection requirements for fire pump wiring

Content Outline

Introduction 2 Minutes

Course Overview

Article 600 Electric Signs and Outline Lighting 5 Minutes

- 600.2 Definitions
- 600.5 Branch Circuits

Article 620 Elevators, Dumbwaiters, Escalators, Moving Walks, Platform Lifts, and Stairway Chairlifts

• 620.2 Selective Coordination

Article 625 Electric Vehicle Power Transfer Systems 10 Minutes

- 625.1 Scope
- 625.2 Definitions
- 625.5 Listing
- 625.54 GFCI Protection

Article 645, Information Technology Equipment (ITE) Rooms

• 645.5, Supply Circuits and Interconnecting Cables

Article 680 Swimming Pools, Fountains, Hot Tubs, Similar Installations

- 680.2 Definitions
- 680.3 Listing
- 680.4 Inspections After Installation

5 Minutes

20 Minutes

5 Minutes

- 680.21 Motors
- 680.22 Lighting, Receptacles, and Equipment
- 680.45 Permanently-Installed Immersion Pools
- 680.50 Applicability

Article 682 Natural and Artificial Bodies of Water

5 Minutes

682.15 Ground Fault Protection

Article 695 Fire Pumps

5 Minutes

695.6 Power Wiring

Conclusion 3 Minutes

Summary and Implications

1. List of reference and source materials/bibliography All material necessary to complete the course is included in the course.

A subject matter expert using his or her own personal knowledge writes the course. Students are not directed to additional material as a requirement for course completion, only as added information for personal interest.

2. Instructor Information

Ryan Jackson – Resume Attached

3. Totals hours of Instruction

1 Hour(s) – this course is online and available 365/24/7 to anyone with internet access

4. Certificate of completion

sample is attached

5. Proof of compliance with interactive distance learning requirements

- a. Courses are being developed with interactivity as a key component in its development. RedVector's 'rule of thumb' is to insert an activity every 3 to 5 minutes or 500 to 800 words of text. We offer a variety of activities through the coursework to keep the user involved and requiring knowledge of the course materials being reviewed in order to move forwards.
- b. Users sign into an account with a unique User Name and Password. We request that a user agree to an affidavit stating that they are the owner of the account before proceeding to the exam. Course completion is measured by passing the exam with a minimum score of 75%.
- c. FL Contractors are notified at the beginning of the course that they are required to spend 50 minutes per credit hour in the course in order to receive an accreditation certificate. The LMS will not allow a certificate to be issued or reflect course completion until the time requirement is not by the user.
- d. By one click of the button on each screen of the coursework, the user is given the option to obtain information in several ways. We have a FAQ page, direct email request to Client Support or they may call through a Toll Free number. Our Client Support Team is available from 8 am to 6 pm, Monday thru Friday. If there is a general question, RedVector consults with several Subject Matter Experts that

respond to questions in a timely manner. If the question is more specific requiring a direct response from the course author, communication is made with the author to provide the user a response.

- e. There is a statement required to be agreed upon by the User confirming their identity before and after taking the test.
- f. Each account is established with a unique user name and password in order to access. If a user is taking a longer than normal time to review a section, they will receive a pop-up and have 90 seconds to respond or their session will time out requiring the user to sign into the site again if they wish to continue the coursework.