7 Things you need to know about CHANGES IN THE 2017 NEC

1 Increased shock protection

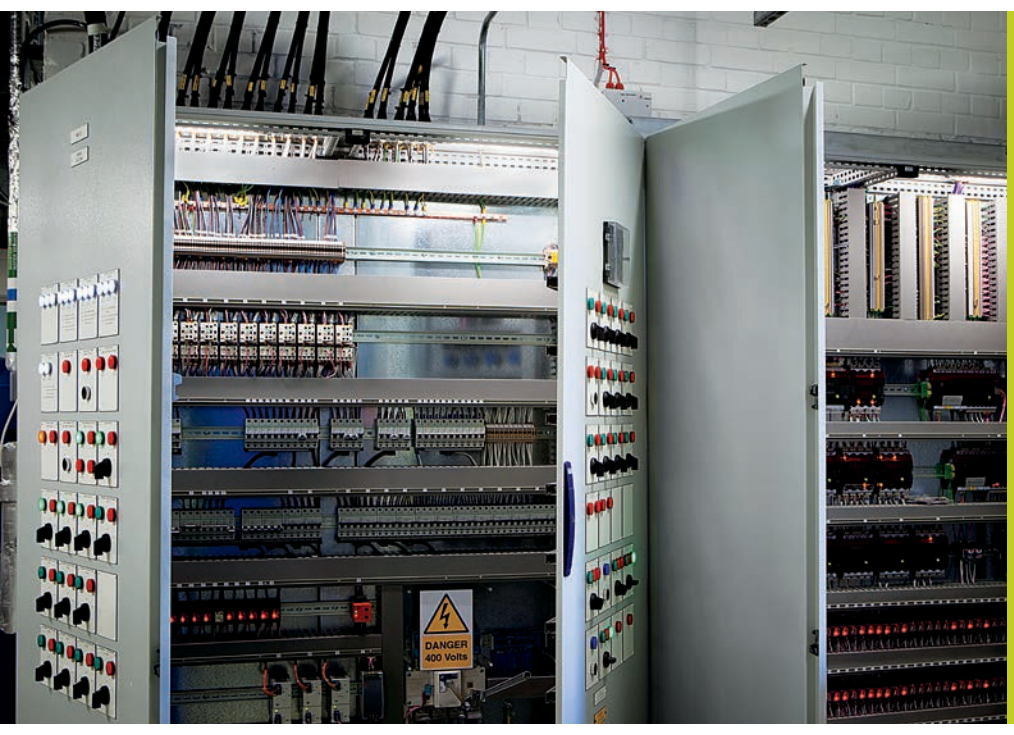
The 2017 National Electrical Code® (NEC) has expanded requirements to protect from shock hazards. In addition to expanded GFCI requirements, there are expanded tamper-resistant receptacle requirements to protect children who explore receptacles with foreign objects—as well as panelboard barrier requirements that help protect electrical workers who work on service entrance equipment. These significant changes will help to continue the downward trend of deaths due to electrical shock.

2 Product listing and suitability

Awareness has been raised around the importance of using products that have been UL® listed and tested to standards compatible with the NEC. The NEC has made a change to the definition of a "structure." The new definition separates the "structure" from electrical equipment, adding clarity for proper application of electric vehicle chargers and other similar equipment where more than one branch circuit may be required.

3 Arc flash awareness

The NEC continues to improve requirements that raise awareness of incident energy hazards. Now, service entrance equipment rated 1200 amps or more must be clearly labeled to help with proper PPE selection, for both fuse and circuit breaker service applications. These requirements continue to receive attention to help reduce incident energy at these service entrance panels.



4 Short-circuit current ratings (SCCR)

The NEC includes several sections with new SCCR requirements. The most significant changes require clearly marking and documenting the available short-circuit current at the location where the equipment is installed. The 2017 NEC also expands the types of equipment that require these additional SCCR markings to include HVAC equipment, elevator control panels, transfer switches and industrial machinery.

5 Available fault current

The proper application of electrical equipment includes rating the equipment to handle the available fault current. The NEC now requires marking or documenting the available fault current for additional types of equipment within the power distribution system. These include elevator control panels, HVAC, motor control centers and other industrial control panel equipment.

6 Surge protection

To help protect people and property, and increase the reliability of the electrical system, the NEC includes new requirements for safety-related circuits. Surge protection is now needed for things like fire pump controllers, wind generation systems and disconnects that supply emergency system loads.

7 Maintenance

Maintenance requirements have been expanded for emergency systems in Article 700 to ensure that the entire emergency system receives maintenance in accordance with manufacturers' instructions, rather than just the battery systems. Compliance to the code and proper maintenance results in an installation that is essentially free from hazard.

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