

**Michigan Chapter IAEI**  
**Spring Meeting in Lansing, Michigan**  
**Code Panel Questions March 11<sup>th</sup> and 12<sup>th</sup>, 2010**

1. The receptacle enclosed in appliance garages on a kitchen counter does not count as the required receptacle for spacing requirements. If the receptacle above a bathroom counter top is enclosed within a cabinet, does another receptacle need to be installed?
2. I am starting to see plans for wind turbines that are interconnected to the commercial power by means of an inverter. I find requirements in article 690 for solar cells, but I cannot find any specific requirements for wind turbans. What rules would regulate this installation?
3. The plans to a dentist office call for the installation of a transfer switch in the mechanical room with the other electrical equipment. There is plumbing that will pass directly over the top of the transfer switch. Does the dedicated space requirements of 110.26 F apply?
4. What are the support requirements for communications cable above a suspended ceiling system?
5. I received plans for a new store. The plans call for a 45 kva transformer to be installed above a dropped ceiling that is being used as the return air space for the building. Is this transformer required to be listed for use in a plenum space?
6. How is the grounding and bonding for a trailer mounted generator used for a pumping station backup power system, installed to meet NEC requirements?
7. We have a project, in a campground, for wiring small, one-room cabins with receptacles for portable cooking stoves and lighting outlets. There is also a table and bed in this room. Is arc-fault protection required because of the sleeping area?
8. Is it required to de-rate conductors in raceways exposed to direct sunlight? If so, by how much?
9. Is there a section in the Code that restricts the use of extension cords?
10. Do the requirements of 400.8(5) apply to factory-supplied cord and plug connected equipment, such as condensate pumps for air handlers, security cameras, and wireless routers install above suspended ceilings?
11. I have been trying to locate wire ties or tie wraps in the UL white book to no avail. Some jurisdictions have been requiring them for support of MC Cable in horizontal runs. I would like to know where to find information on this in the UL White Book and the NEC.
12. Is a fire suppression water sprinkler line required to be used as a grounding electrode the same as the metal water service?
13. What types of raceways are acceptable for the underground run from a gas pump on the island at a service station to the interior of the building?
14. Is a doublewide mobile home mounted on a permanent foundation, considered a permanent installation and must it be wired like a dwelling?
15. An unfinished basement has a GFCI duplex receptacle which serves the sump pump. Can this GFCI receptacle also serve as my required receptacle for the unfinished basement since I am only using 1/2 of it for the sump pump?
16. What is the voltage limitation that can be applied to a network-powered broadband communications systems conductor?
17. During a recent inspection of a panelboard with a number of AFCI breakers installed. These breakers were significantly warmer than the regular breakers. Is this a problem?

18. The measurement of a wall is inclusive of the corners and change of direction in residential receptacle location requirements. Why is a boxed in column with 12” sides that measure 48” with all sides taken into consideration not required to have a receptacle?
19. I have a question in regards to new Section 406.11, which states tamper-resistant receptacles are to be installed in “all areas specified in 210.52”. Does this mean that a receptacle for a refrigerator, garage door opener, sump pump, vacuum system etc., would not be required to be tamper-resistant since they are not required in 210.52?
20. I have received plans for a residential addition. Because of the grade change, the service disconnect will be mounted one foot off the ground. Is there a minimum allowable height for a service disconnect on a residential home?
21. Can a 30kVA transformer be suspended above a suspended ceiling used for environmental air?
22. Is NM cable considered secured or supported when installed behind a 1 5/8 inch deep narrow strip of Styrofoam? Note: The installation practice was to remove a 2 inch deep narrow strip of Styrofoam from a pored concrete wall, the NM cable is then installed and the Styrofoam is trimmed from 2 inches to 1 5/8 inches deep and reinstalled and friction held in place until wall covering is installed.
23. How do I know if a recessed luminaire can be installed in a fire-rated assembly?
24. Does the Code permit the use of a padlock on the panel door to restrict access?
25. I neglected to connect to the rebar in the footings of a new building. Can the re-bar in the concrete basement walls be utilized for the UFER electrode instead?
26. With the cost of copper going up, we are seeing metal water services being replaced with PEX® (Plastic) pipe. Is it appropriate to require that the electrical service be regrounded, and if so, who can reground the service?
27. An old house has 2-wire ungrounded circuits in some rooms. Can I replace these with new ungrounded receptacles? Do they have to be tamperproof?
28. Many jurisdictions have adopted the new energy codes. Will the NEC incorporate these requirements or leave it up to the AHJ since it is not an international requirement?
29. I have plans for a health care facility. They have specified hospital grade Type AC cable. Is there a special fitting listed for hospital grade use?
30. I have a lay-in ceiling in a family room in a residential basement. The space above the ceiling is used for environmental air. Can I use non-metallic cable above this ceiling?

The Code Panel Questions and Answers will be posted on the  
Chapter Website when available following the meeting.

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