

Michigan Chapter IAEI
Summer Meeting in Bay City, Michigan
Code Panel Questions June 16th and 17th, 2011

1. A kitchen counter has a 60" window behind it in lieu of a wall. There is no backsplash high enough to install a receptacle within the 24" rule. Would a receptacle installed at each end of the glass be sufficient?
2. How many feet of USE cable can enter a house to feed a service?
3. A kitchen island has a 4' long framed and drywall backside facing the family room. Can the small appliance circuit serving the countertop also serve the receptacle located on this wall?
4. What is the difference between weather-resistant receptacles and standard ones? Why were the standard ones acceptable in the past but are suddenly no good anymore?
5. Is a receptacle located behind a refrigerator in a staff lounge required to be GFCI protected when there is another GFCI protected receptacle above the counter between the sink and the refrigerator?
6. Article 210.12(B) gives a list of outlets and similar rooms that shall be protected by an AFCI circuit but it excludes other areas that require GFCI circuits. Does this exclusion also cover the wet bar GFCI receptacle?
7. What rating is needed for a disconnect switch for a long-time rated X-ray machine?
8. Are general-use Rigid Metal Conduit compression-type fittings allowed in a Class 1 Division 2 location?
9. As an inspector, should I refuse to accept 15 amp receptacles installed in a building where the engineer specified 20 amp receptacles?
10. I have a store being constructed in our city. All of the footings are over-dug and then rock is brought in and compacted. All of the exterior footings are poured on a rock base. Does the concrete-encased electrode function in this situation? Do we need to bond the rebar?
11. Can fluorescent fixtures permanently secured to a ceiling be cord-and-plug connected?
12. Is a standard wire-nut approved for a wet location as in an outside j-box? Is there a listed wet location wire-nut other than the ones approved for direct burial or in below grade j-boxes?
13. What is the "service factor" that is required to be marked on Fire Pumps?
14. What are the support requirements for communications cable above a suspended ceiling system?

15. Is a receptacle located behind a refrigerator in a staff lounge required to be GFCI protected when there is another GFCI protected receptacle above the counter between the sink and the refrigerator?
16. Does the NEC allow receptacle outlets above a suspended ceiling for cord and plug connection of equipment?
17. I was told that I had to pigtail the neutral connection to receptacles to prevent an open neutral if one of the receptacles was removed. Is this true?
18. How could the calculations of the selective coordination, required by NEC 700.27, be verified by the electrical plan review?
19. Can any part of the allowed 1.8 m (6 ft) length of Type MC cable that is unsupported, touch, lie on, or otherwise come in contact with the suspended ceiling grid or liftout panels?
20. We have the circuit for an A/C and also a GFCI circuit in the same raceway, but the GFCI needs to be mounted a few feet away. Can the A/C disconnect be used as a raceway for the circuit?
21. Does a long run of PVC in the earth below the frost line need expansion fittings below grade or where exiting the earth?
22. Does a fire alarm control panel need to have the working space described in Article 110.26?
23. Does a structural steel beam, located in the basement of a residence, require grounding?
24. What would be the proper way to bond a rigid metal 90-degree "ell" used in-between rigid PVC conduit on a service installation?
25. If a metallic conduit sleeve containing a grounding electrode conductor is run from a panel to the Ground electrode, does the panel end of the sleeve need to have a bonding fitting installed in addition to the conduit connector?
26. Are nail plates required for MC cables run horizontally through 1 ½' metal studs?
27. Can I run a 3-wire multi-wire circuit using two individual single-pole circuit breakers without handle ties for two lighting circuits in a residence?
28. Where does it say I can use a metallic outlet box in a 2 hour fire rated wall?
29. In Health care facilities, do the emergency panel and normal power panel feeding the same area have to be bonded together?
30. Is Ground Fault Protection required for service equipment rated at 1000 amps but fused at 800 amps? The service is a 3-phase, 4-wire, 277/480 volt.

31. Where does the equipotential bonding grid need to be installed for a hot tub installed on a wooden deck?
32. Why does the equipment grounding conductor in a feeder to a mobile home have to be insulated?
33. We installed a separately derived system (transformer) at the far end of a large warehouse. We proposed to use a primary equipment grounding conductor that would be sized based on the required grounding electrode for the derived system. This way one conductor acts as both the equipment grounding conductor and grounding electrode conductor. Is this installation prohibited?
34. Can a 2-pole snap switch be used to switch a 277V and 120V circuit?
35. A new commercial kitchen has a piece of kitchen equipment with a 20 amp, 125 volt twist lock connector, is GFCI protection required?
36. Is it permissible to run non-metallic cable through kitchen cabinets at peninsulas and islands where it is not subject to damage or does it always have to be sleeved?

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

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