

International Association of Electrical Inspectors
Michigan Chapter Spring Meeting
March 1st and 2nd, 2012

1. What are Classified breakers and how do I know what are they suitable for?
2. I am looking for the section for sizing the grounded conductor (neutral) for branch circuits. I have the sections for service neutral per 250.24(C)(1), Table 250.66 and feeder neutrals per 215.2(A)(1), Table 250.122 & 220.61.
3. I'm supplying power to a detached residential garage for 100 amps, can I use #2 AL using the Table 310.15(B)(6) or do I need to use #1 AL according to table 310-16?
4. An inspector is requiring that the 6 foot dedicated electrical space as defined in Section 110.26, be observed above an automatic transfer switch. Is this required and, can you explain when the clearance requirements of Article 110.26 apply?
5. When a NEMA 3R metal enclosure is penetrated with a conduit, can a sealing gasket be installed on the interior of the enclosure?
6. Do I have to adjust conductor ampacity per NEC table 310.15(B)(2)(a) for more than 3 current-carrying conductors in a raceway service mast? This mast is on the line side of the utility meter.
7. Can more than one receptacle in a laundry room be on the required laundry circuit? If the laundry equipment, washer/dryer is in one room but the owner irons clothes in another room, can the circuit go to two rooms?
8. Is it permitted to put a GFCI protected receptacle within the three-foot area around a tub or shower?
9. Article 230.2(B)(2) seems to allow more than one service on a building that is sufficiently large to make two or more services necessary. What is meant by the turn "sufficiently large"?
10. Section E3609.7.2 of the Michigan Residential code seems to require that CSST (Corrugated stainless Steel Tubing) be bonded based on the size of the grounding electrode conductor. I am told that there are CSST products that don't require this bonding. Are there any exceptions?
11. An airplane hanger has overhead cranes installed. The controls are installed on cord, hanging down from the cranes. The controls end up in the hazardous area. Do these controls have to be explosion proof?
12. In a residential garage is it permitted to install receptacles within 18 inches of the floor?

13. I have a building sign that extends around the corner of a building. With my disconnect located at one end of the sign is it considered as being with-in sight of the sign?

14. The NEC requires one receptacle for the laundry; however, the laundry space is a small closet. The laundry equipment is stacked washer-dryer supplied by a 30-ampere branch circuit. Are we still required to provide a receptacle on a separate 20-ampere branch circuit to this small place?

15. I have a range hood only over my range with a 1/3-horse power motor. I am aware that I cannot share this load with the small appliance branch circuits. May I share this range hood appliance load with a 15-amp general lighting branch circuit serving the living room?

16. An electrician has proposed adding second meter on the back of a garage to meter a car charging station. The house meter is on the front of the building. Is this permitted or do the meters have to be grouped together.

17. When using the exception for an individual 15 ampere branch circuit for refrigeration equipment in a dwelling unit kitchen, can this 15 ampere branch circuit supply other refrigeration equipment such as a wet bar refrigerator in the living room.

18. Does the NEC permit using the high leg and the grounded conductor of a 120/240-volt delta system to connect a single-phase, 208-volt motor?

19. Since the disconnecting means for a separate building is required to be suitable for use as service equipment, is it limited to six disconnects?

20. I have seen free standing furniture partitions used in areas used for patient care. Does the wiring for these partitions meet the grounding requirements of article 517?

21. I am wiring baseboard heaters in my home. Can I load the branch circuit @ 100% or do I need to consider this branch circuit to be continuous in nature?

22. The paving in a gas station parking lot is going to be 6 inch thick concrete. When applying the depth requirements from 300.5, do I measure from the top of the concrete or the top of the dirt

23. When re-locating a temporary service panel to a different job site, do the receptacle outlets have to be changed to the weather-resistant type?

24. Does the NEC allow any receptacles in a bathroom to be on a 15-ampere circuit? The homeowner wants a lighting receptacle to plug in rope lights as a night-light. The 15-ampere receptacle would be GFCI protected and in addition to the required 20-ampere receptacle circuit.

25. Can I use a 3-wire w/ground NM cable for temporary wiring on a construction site as a multi-wire branch circuit if I feed temporary receptacles on one circuit and lighting on the other circuit?
26. Can a 10.5A 120V rated fan-light-heat unit be installed in a bathroom and be supplied from the same 20 Amp circuit supplying the bathroom receptacle?
27. I have seen numerous furnaces fed with MC cable strapped to the gas piping. Is using the gas piping as a means of support acceptable?
28. In a new structure where the rebar was covered before the electrician was on site, what would be some other options to provide a Ufer ground that would be acceptable?
29. I have installed liquidtight metal flexible conduit to several RTU's (rooftop units). The space above the ceiling is used for environmental air return. The inspector has asked me to replace it. Can't it be used in this application?
30. Can a 3/8 inch flexible metal conduit that is less than 6 foot long be used to feed a receptacle box from a junction box?
31. I have observed a metallic, Myers hub installed on top of a plastic junction box and then PVC continuing on to a NEMA 3R pedestal with RV receptacles enclosed. Is there a problem with not bonding the Myers hub?
32. Does bare copper grounding electrode conductor through ferrous raceway relieve the requirement to bond the raceway at both ends?
33. If I change out my dwelling panel because of insurance or upgrade from 60 amps to 100 amps, do I need to change anything in the rest of the house besides the service entrance?
34. Does the NEC require space for future circuits in a electrical service panel or can it be filled with breakers?
35. Does a grounding electrode conductor over 100' long need to be increased in size to compensate for the length?
36. Does the 2008 NEC require a concrete encased ground?

***Summer Educational Seminar
June 21 and 22, 2012
Otsego Club Gaylord***