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**Michigan Department of Energy, Labor & Economic Growth
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Electrical Connections of Manufactured Homes

“Providing for Michigan’s Safety in the Built Environment”

Technical bulletins are issued to provide clarification on issues that arise regarding code administration and enforcement. The information provided in the bulletin is developed to promote uniform interpretation and enforcement of the state codes.

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ELECTRICAL CONNECTIONS OF MANUFACTURED HOMES

Issue

Technical Bulletin Number 2 addresses the question of who may perform connections of manufactured homes when they are installed on privately owned sites or in a licensed mobile home park. Bulletin Number 2 addresses all disciplines of the code (building, electrical, mechanical, and plumbing). This technical bulletin will only address the issue of electrical connections that are performed in a mobile home park. It is the purpose of this technical bulletin to clarify the type of wiring methods that may be used to connect manufactured homes and what electrical work may be performed by licensed mobile home dealers and installers.

This technical bulletin will refer to both mobile and manufactured homes. The term “mobile” is the word most commonly used and appears in the Mobile Home Commission Act, PA 96 of 1987, as amended. The term “manufactured” is the preferred name used by the mobile manufactured home industry. Neither of the terms are intended to be confused with the pre-manufactured housing program which is regulated in accordance with the requirements of Part 11 of the Stille-DeRossett-Hale Single State Construction Code Act, 1972 PA 230.

Wiring Methods

Section 550.33 of the 2002 National Electrical Code prescribes the wiring methods that may be used to connect manufactured homes to the service equipment and states:

“Feeder conductors shall consist of either a **listed cord, factory-installed in accordance with Section 550.10(B)**, or a permanently installed feeder consisting of four, insulated, color-coded conductors that shall be identified by the factory or field marking of the conductors in compliance with Section 310.12. **Equipment grounding conductors shall not be identified by stripping the insulation.**”
(Emphasis is added to two parts of the above code section)

The first emphasis highlights the specific requirements for factory installed cords and refers us to Section 550.10(B), which prescribes the type of cord to be used and how it may be connected. Sub-section 550.10(A) also tells us that the cord type connection shall be a 50-ampere mobile home power supply cord with integral molded cap.

The second emphasis refers to the fact that, although Section 310.12 of the code permits stripping of insulation as identification means for equipment grounding conductors, it is the intent of Section 550.33 to only permit insulated equipment grounding conductors that have green insulation or green identification on exposed insulation, when permanent feeders are installed.

Licensing Law

Electrical contractors are licensed in accordance with the Electrical Administrative Act, 1956 PA 217. Such licensure is required of any person, firm, or corporation that engages in the business of installing electrical wiring and equipment.

Mobile home dealers and installers/repairers are licensed in accordance with 1987 PA 96. Such licensure is required of any person, firm, or corporation that engages in the business of mobile home set-up, installation, or general repair. Section 25(3) of the act states, in part:

“The electrical administrative act...shall not apply to the setup or installation of a mobile home and the following connections or replacement or repair of the following connections, by a licensed mobile home installer and repairer:

(a) **Factory-installed electrical wiring** (emphasis added), devices, appliances, or appurtenances to available electrical meters or pedestals...”

Discussion

Section 550.33(A) of the code tells us that the feeder is permitted to be a listed cord, **factory-installed** in accordance with Section 550.10(B). Section 550.10(B) tells us that the **factory-installed** cord must be permanently attached to the distribution panelboard or to a junction box, which has permanent connections to the panelboard, and that the free end must terminate in an attachment plug cap. Section 550.10(A) further states that if the feeder is a cord it must consist of: “...not more than **one listed 50-ampere mobile home power-supply** cord with integral molded cap...”.

This language is further supported by a September 6, 1996, letter from the Manufactured Housing Division of the Department of Energy, Labor & Economic Growth. The letter states the following in reference to connection of electrical supply from the manufactured home community service to a manufactured home:

“The position of the Mobile Home Commission is that a licensed dealer or installer/repairer may not connect the electrical supply line if direct wiring is required or, in the case of a simple plug in, if the calculated load is more than 50-amperes. In other words, a licensed dealer or installer/repairer may only connect the electrical supply line in the case of a simple plug in where the calculated load is 50-amperes or less.”

Conclusion

Manufactured/mobile homes that are installed in a park, licensed by the Department of Energy, Labor & Economic Growth' Manufactured Housing Division may only be connected to the service equipment by a licensed electrical contractor, who shall obtain an electrical permit from the authority having jurisdiction. The exception is a licensed

mobile home dealer or installer/repairer may plug in a factory-installed cord, not in excess of a 50-amperes rating. The cord must be connected by a cord cap/receptacle connection.

Questions regarding this technical bulletin may be directed to the Michigan Department of Energy, Labor & Economic Growth, Bureau of Construction Codes, Electrical Division, P.O. Box 30254, Lansing, MI 48909 or by calling (517) 241-9320.