



**ELECTRICAL GROUNDING AND BONDING
FOR AMUSEMENT DEVICES**

State Form 52376 (R / 5-16)

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Recent accidents serve to remind us how critical grounding and bonding are to amusement device safety. The following is an overview of some of the Indiana Electrical Code requirements for grounding and bonding applicable to regulated amusement devices. This is not intended to be all inclusive and other sections of the Indiana Electrical Code do apply to amusement devices.

Article 525 of the 2002 Edition of the National Electrical Code, as adopted and as amended by 675 IAC 17-1.6 (the Indiana Electrical Code), applies to the installation of portable wiring and equipment for carnivals, circuses, fairs, and similar functions, including wiring in and on all structures.

1. **EQUIPMENT BONDING:** As required by Section 525.30 of the Indiana Electrical Code, any of the following equipment connected to the same source shall be bonded:
 - A. Metal raceways and metal-sheathed cable.
 - B. Metal enclosures of electrical equipment.
 - C. Metal frames and metal parts of rides, concessions, tents, trailers, trucks or other equipment that contain or support electrical equipment.

2. **EQUIPMENT GROUNDING:** As required by Section 525.31 of the Indiana Electrical Code:
 - A. All equipment requiring grounding shall be grounded by an equipment grounding conductor of a type and size recognized by Section 250.118 of the Indiana Electrical Code and installed in accordance with Article 250 of the Indiana Electrical Code.
 - B. The equipment grounding conductor shall be bonded to the system grounding conductor at the service disconnecting means or, in the case of a separately derived system such as a generator, at the generator or the first disconnecting means supplied by the generator.
 - C. The grounded circuit conductor shall not be connected to the equipment grounding conductor on the load side of the service disconnecting means or on the load side of a separately derived system disconnecting means.

3. **GROUNDING CONDUCTOR CONTINUITY ASSURANCE.** As required by Section 525.32 of the Indiana Electrical Code; **the continuity of the grounding conductor system** used to reduce electrical shock hazards as required by Sections 250.114, 250.138, 406.3(C) and 527.4(D) of the Indiana Electrical Code **shall be verified each time that portable equipment is connected.**

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Signature	Date (month, day, year)
Printed name	Title/position