



**CATAWBA COUNTY  
BUILDING SERVICES  
DIVISION**

INFO FOR CUSTOMER SUCCESS

**Guidelines For Special  
Events, Bazaars, Carnivals,  
Circuses, Fairs, Festivals  
and other Outdoor Events**

**GUIDE SHEET**

**#002**

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**1. Temporary Event Permit Applications and Approvals**

- [ ] **1.1** Local Planning & Zoning Department approval required.
- [ ] **1.2** County Building Services Division approval required.
- [ ] **1.3** Local Fire Department approval required.
- [ ] **1.4** County Environmental Health Department approval required for temporary food establishments.
- [ ] **1.5** Police/Sheriff Department approval required.
- [ ] **1.6** North Carolina Department of Labor approval required for rides and amusement devices.

**2.1 Site Plan Approval**

- [ ] **2.1.1 Site Plan Review.** Submit a site plan that includes the following:
  - a) Location of outdoor stages, bleachers, modular suites, tents, cooking tents, ticket booths, game booths, trailers, fuel storage, electrical equipment locations such as generators, electrical feeders, distribution sub-panels and portable power distribution (spider) boxes.

**2.2 Safety Permit Requirement**

- [ ] **2.2.1 Safety Permit.** Obtain a safety permit for inspection of electrical equipment and installations identified in sections 2.4 through 2.17 listed below prior to setting up the event. Permits can be obtained at the Catawba County Government Center 100A SW Blvd Newton, NC or Hickory City Hall 76 North Center Street Hickory, NC.
- [ ] **2.2.2 Building Permit.** Obtain building permits for the inspection of bleachers, modular suites, stages & elevated floor systems exceeding thirty inches in height. Prior to setting up the event. Permits can be obtained at the Catawba County Government Center 100A SW Blvd Newton, NC or Hickory City Hall 76 North Center Street Hickory, NC.

**2.3 Electrical Permit Requirement**

- [ ] **2.3.1 Electrical Permit.** Obtain an electrical permit for all temporary or permanent electrical services before installation. All electrical service work shall be in accordance with the current edition of the National Electrical Code (NEC). Permits can be obtained at the Catawba County Government Center 100A SW Blvd Newton, NC or Hickory City Hall 76 North Center Street Hickory, NC.

**2.4 Generator**

[ ] **2.4.1 Portable & Vehicle-Mounted Generators**

**2.4.1.1 Portable Generators.** The frame of a portable generator shall not be required to be connected to a grounding electrode as defined in 250.52 for a system supplied by the generator under the following conditions:

- a) The generator supplies only equipment mounted on the generator, cord-and-plug-connected equipment through receptacles mounted on the generator, or both, and
- b) The non-current-carrying metal parts of equipment and the equipment grounding conductor terminals of the receptacles are bonded to the generator frame.



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**2.4.1.2 Vehicle-Mounted Generators.** The frame of a vehicle shall not be required to be connected to a grounding electrode as defined in 250.52 for a system supplied by a generator located on this vehicle under the following conditions:

- a) The frame of the generator is bonded to the vehicle frame, and
- b) The generator supplies only equipment located on the vehicle or cord-and-plug-connected equipment through receptacles mounted on the vehicle, or both equipment located on the vehicle and cord-and-plug-connected equipment through receptacles mounted on the vehicle or on the generator, and

(3) The non-current-carrying metal parts of equipment and the equipment grounding conductor terminals of the receptacles are bonded to the generator frame.

**2.4.2** Generator is guarded so that the public does not have access.

**2.4.3** Label generator main disconnect.

**2.4.4** Generator electrical panel dead front is to be installed and all branch circuits and feeders labeled.

**2.4.5** Close all unused openings in the generator's electrical panel.

## **2.5 Transformers**

**2.5.1** Transformers shall comply with the applicable requirements of 240.4(A), (B)(3), and (C); 250.30; and Article 450 of the NEC.

## **2.6 Services**

**2.6.1** Services shall be installed in accordance with the applicable requirements of Article 230 of the NEC and, in addition, shall comply with the following:

**2.6.1.1** Guarding. Service equipment shall not be installed in a location that is accessible to unqualified persons, unless the equipment is lockable.

**2.6.1.2** Mounting and Location. Service equipment shall be mounted on a solid backing and be installed to be protected from the weather, unless of weatherproof construction.

## **2.7 Wiring Method**

**2.7.1** Flexible cords and cables shall comply with the following:

**2.7.1.1** Flexible cords and cables shall be listed for extra-hard usage, except where not subject to physical damage they may be listed for hard usage.

**2.7.1.2** Flexible cords and cables used outdoors shall be listed for wet locations and shall be sunlight resistant.

**2.7.1.3** Extra-hard usage flexible cords or cables shall be permitted for use as permanent wiring on portable amusement rides and attractions where not subject to physical damage.

**2.7.1.4** Single conductors. Single-conductor cable shall be permitted only in sizes 2 AWG or larger.

**2.7.1.5** Splices. Flexible cords or cables shall be continuous without splice or tap between boxes or fittings.



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**2.7.1.6 Cord connectors.** Cord connectors shall not be laid on the ground unless listed for wet locations. Connectors and cable connections shall not be placed in audience traffic paths or within areas accessible to the public unless guarded.

**2.7.1.7 Protection.** Flexible cords or cables accessible to the public shall be arranged to minimize the tripping hazard and shall be permitted to be covered with nonconductive matting or 30lb roofing felt provided that the matting does not constitute a greater tripping hazard than the uncovered cables. It shall be permitted to bury cables. The requirements of 300.5 of the NEC shall not apply. Where subject to vehicle traffic, wooden boards may be anchored to the ground on each side of the cable.

**2.7.1.8 Boxes and Fittings.** A box or fitting shall be installed at each connection point, outlet, switch-point, or junction point.

**2.7.1.9 Cord connections.** All cords shall be properly connected to equipment and shall have strain relief.

**2.8 Open Conductor Requirements.**

[ ] **2.8.1 Open Conductors.** Open conductors are prohibited except as part of a listed assembly or festoon lighting installed in accordance with Article 225 of the NEC.

**2.9 Rides, Tents and Concessions (Rides Subject to Department of Labor Approval)**

[ ] **2.9.1 Disconnecting Means.** Each ride and concession shall be provided with a fused disconnect switch or circuit breaker located within sight and within 6 ft. of the operator's station. The disconnecting means shall be readily accessible to the operator, including when the ride is in operation. Where accessible to unqualified persons, the enclosure for the switch or circuit breaker shall be of the lockable type. A shunt trip device that opens the fused disconnect or circuit breaker when a switch located in the ride operator's console is closed shall be a permissible method of opening the circuit.

[ ] **2.9.2 Weatherproof.** Sub-panels, controllers, disconnects, junction boxes, etc., if exposed to the weather shall be weatherproof (receptacles, switches, enclosures, boxes and cover plates).

[ ] **2.9.3 Portable Wiring Inside Tents and Concessions.** Electrical wiring for lighting, where installed inside of tents and concessions, shall be securely installed and, where subject to physical damage, shall be provided with mechanical protection. All lamps for general illumination shall be protected from accidental breakage by suitable fixture or lamp-holder with a guard.

**2.10 Portable Distribution or Termination Boxes**

[ ] **2.10.1 Portable Distribution or termination shall comply with the following:**

**2.10.1.1 Listing.** All equipment for portable power distribution shall be listed, and to include portable power distribution boxes, feeder cables and connectors.

**2.10.1.2 Construction.** Boxes shall be designed so that no live parts are exposed to accidental contact. Where installed outdoors, the box shall be of weatherproof construction and mounted so that the bottom of the enclosure is not less than 6 in. above the ground.



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**2.10.1.3 Bus-bars and Terminals.** Bus-bars shall have an ampere rating not less than the over-current device supplying the feeder supplying the box. Where conductors terminate directly on bus-bars, bus-bar connectors shall be provided.

**2.10.1.4 Receptacles and Over-current Protection.** Receptacles shall have overcurrent protection installed within the box. The over-current protection shall not exceed the ampere rating of the receptacle, except as permitted in Article 430 of the NEC for motor loads.

**2.10.1.5 Single-Pole Connectors.** Where single-pole connectors are used, they shall comply with Article 530, Section 530.22 of the NEC.

**2.11 Ground-Fault Circuit-Interrupter (GFCI) Protection for Personnel.**

[ ] **2.11.1 Protection.** Equipment that is readily accessible to the general public and supplied from a 125-volt, single-phase, 15- or 20-ampere branch circuit, shall be GFCI protected. The ground-fault circuit interrupter shall be permitted to be an integral part of the attachment plug or located in the power-supply cord, within 12 inches of the attachment plug. Listed cord sets incorporating ground-fault circuit-interrupter protection for personnel shall be permitted.

**2.12 Protection of Electrical Equipment.**

[ ] **2.12.1 Protection.** Electrical equipment and wiring methods in or on rides, concessions, or other units shall be provided with mechanical protection where such equipment or wiring methods are subject to physical damage.

**2.13 Equipment Bonding.**

[ ] **2.13.1 Bonding.** The following equipment connected to the same source shall be bonded:

2.15.2 Metal raceways and metal-sheathed cable

2.15.3 Metal enclosures of electric equipment

2.15.4 Metal frames and metal parts of rides, concessions, tents, trailers, trucks, or other equipment that contain or support electrical equipment

**2.14 Equipment Grounding.**

[ ] **2.14.1 Equipment Grounding Conductor.** All equipment requiring grounding shall be grounded by an equipment grounding conductor of a type and size recognized by 250.118 of the NEC and installed in accordance with Article 250 of the NEC. The equipment grounding conductor shall be bonded to the system grounded conductor at the service disconnecting means or, in the case of a separately derived system such as a generator, at the generator or first disconnecting means supplied by the generator. 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.



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### 2.15 Portable and Temporary Audio System Installations (Article 640 NEC)

#### [ ] 2.15.1 Multi-pole Branch-Circuit Cable Connectors.

Multi-pole branch-circuit cable connectors, male and female, for power supply cords and cables shall be so constructed that tension on the cord or cable is not transmitted to the connections. The female half shall be attached to the load end of the power supply cord or cable. The connector shall be rated in amperes and designed so that differently rated devices cannot be connected together. Alternating-current multi-pole connectors shall be polarized and comply with 406.6(A) and 406.6(B) and 406.9. Alternating-current or direct-current multi-pole connectors utilized for connection between loudspeakers and amplifiers, or between loudspeakers, shall not be compatible with non-locking 15- or 20-ampere rated connectors intended for branch-circuit power or with connectors rated 250 volts or greater and of either the locking or non-locking type. Signal cabling not intended for such loudspeaker and amplifier interconnection shall not be permitted to be compatible with multi-pole branch-circuit cable connectors of any accepted configuration.

FPN: See 400.10 for pull at terminals.

#### [ ] 2.15.2 Use of Flexible Cords and Cables.

a) Between Equipment and Branch-Circuit Power. Power supply cords for audio equipment shall be listed.

b) Between Loudspeakers and Amplifiers, or Between Loudspeakers. Flexible cords and cables used to connect loudspeakers to each other or to an amplifier shall comply with Article 400 and Article 725, respectively. Cords and cables listed for portable use, either hard or extra-hard usage as defined by Article 400, shall also be permitted.

c) Between Equipment and/or Between Equipment Racks. Flexible cords and cables used for the distribution of audio signals between equipment shall comply with Article 400 and Article 725, respectively. Cords and cables listed for portable use, either hard or extra-hard service as defined by Article 400, shall also be permitted.

d) Between Equipment Racks and Branch-Circuit Power. The supply to a portable equipment rack shall be by means of listed extra-hard usage cords or cables, as defined in Table 400.4. For outdoor portable or temporary use, the cords or cables shall be further listed as being suitable for wet locations and sunlight resistant.

[ ] 2.15.3 Wiring of Equipment Racks. Equipment racks fabricated of metal shall be grounded. Nonmetallic racks with covers (if provided) removed shall not allow access to Class 1, Class 3, or primary circuit power without the removal of covers over terminals or the use of tools.

Equipment racks shall be wired in a neat and workmanlike manner. Wires, cables, structural components, or other equipment shall not be placed in such a manner as to prevent reasonable access to equipment power switches and re-settable or replaceable circuit overcurrent protection devices.

Wiring that exits the equipment rack for connection to other equipment or to a power supply shall be relieved of strain or otherwise suitably terminated such that a pull on the flexible cord or cable shall not increase the risk of damage to the cable or connected equipment such as to cause an unreasonable risk of fire or electric shock.



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[ ] **2.15.4 Environmental Protection of Equipment.** Portable equipment not listed for outdoor use shall be permitted only where appropriate protection of such equipment from adverse weather conditions is provided to prevent risk of fire or electrical shock. Where the system is intended to remain operable during adverse weather, arrangements shall be made for maintaining operation and ventilation of heat-dissipating equipment.

[ ] **2.15.5 Protection of Wiring.** Where accessible to the public, flexible cords and cables laid or run on the ground or on the floor shall be covered with approved nonconductive mats. Cables and mats shall be arranged so as not to present a tripping hazard.

[ ] **2.15.6 Equipment Access.** Equipment likely to present a risk of fire, electrical shock, or physical injury to the public shall be protected by barriers or supervised by qualified personnel so as to prevent public access.

### **2.16 Attractions Using Pools & Similar Installations with Contained Volumes of Water. Lighting Fixtures, Submersible Pumps, & Other Submersible Equipment (Art 680.51 NEC)**

[ ] **2.16.1 Ground-Fault Circuit Interrupter.** Lighting fixtures, submersible pumps, and other submersible equipment, unless listed for operation at 15 volts or less and supplied by a transformer listed for pool & span use shall be protected by a ground-fault circuit interrupter

[ ] **2.16.2 Grounding.** The following equipment shall be grounded:

- a) All electrical equipment located within the fountain or within 1.5 m (5 ft) of the inside wall of the fountain
- b) All electrical equipment associated with the re-circulating system of the fountain
- c) Panel-boards that are not part of the service equipment and that supply any electrical equipment associated with the fountain

[ ] **2.16.3 Ground-Fault Circuit Interrupter.** All electrical equipment, including power-supply cords, shall be protected by ground-fault circuit interrupters

[ ] **2.16.4 Portable Electric Sign.** A portable electric sign shall not be placed within a pool or fountain or within 1.5 m (5 ft) measured horizontally from the inside walls of the fountain.

### **2.17 Overhead Conductor Clearances.**

[ ] **2.17.1 Clearances to Tents and Concessions.** Conductors shall have a vertical clearance to ground in accordance with 225.18 of the NEC. These clearances shall apply only to wiring installed outside of tents and concessions.

[ ] **2.17.2 Clearance to Rides and Attractions.** Amusement rides and amusement attractions shall be maintained not less than 15 ft. in any direction from overhead conductors operating at 600 volts or less, except for the conductors supplying the amusement ride or attraction. Amusement rides or attractions shall not be located under or within 15 ft. horizontally of conductors operating in excess of 600 volts.



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### **3. Rides**

**[ ] 3.1 State Approval.** Provide current State approval sticker for ride. The Elevator and Amusement Device Bureau checks for the proper installation and safe operation of amusement rides and inflatable devices. Effective July 1, 2004, the NC Dept. of Labor requires a **10-day advanced location notice** in order to have an inspector scheduled at your location to conduct a safety inspection. The "Advanced Location Notice" may be processed on line at <http://www.nclabor.com/elevator/forms.htm>. For additional information please contact the NC Department of Labor at (919) 807-2770 or visit their website at [www.nclabor.com](http://www.nclabor.com).

**4. Bleachers, Modular Suites, Stages & Elevated Floor Systems.** In order to ensure public safety and ADA accessibility requirements are in place during the event a building permit is required for each temporary structure other than tents. These structures include bleachers, modular suites, stages and elevated floor systems.

**[ ] 4.1 Bleachers.** Provide two sets of documentation by a North Carolina registered design professional of the structural stability for all bleacher systems. The documentation shall be sealed design plans that identify a minimum vertical live load of 100 (psf) based on the presumptive soil conditions at the site. In addition to the vertical live load, horizontal swaying forces parallel and normal to the length of seats shall be included in the design according to the requirements of NFPA 102.

**4.1.1** Provide details of ADA compliant landings, ramps and seating serving all bleacher systems.

**[ ] 4.2 Modular Suites.** Provide two sets of manufacturers set up documentation for each suite style to be assembled on site. This documentation shall identify the set up procedures for the presumptive soil conditions at the site as well as the tie down procedures for a basic wind speed of 90 miles per hour.

**4.2.1** Provide details of ADA compliant landings, ramps serving the lower level of each modular suite.

**[ ] 4.3 Stages & Elevated Floor Systems.** Provide two sets of structural documentation by a North Carolina registered design professional of the structural stability for all elevated floor systems exceeding 4 feet in height . The documentation shall be sealed design plans that identify a minimum vertical live load of 100 pounds per square foot based on the presumptive soil conditions at the site.

**4.3.1** Provide details of ADA compliant landings and ramps from all required exits serving elevated floor systems.

**[ ] 4.4 Stairs and Handrails.** Install proper stairs and handrails to the following requirements:

**4.4.1** Stairs require 7" maximum rise and 11" minimum step.

**4.4.2** Handrails to be between 34 to 38 inches above steps.

**4.4.3** Install stage according to approved set of engineered erection plans.



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**5. Tents, Canopies or Membrane Structures.** Approval from the Local Fire Prevention Official is required for all tents.

[ ] **Catawba County Fire Marshal.** The Catawba County Fire Marshal's Office has jurisdiction for events located in Town of Catawba, Town of Claremont, Town of Maiden, Town of Longview and Catawba County. To view general information and guidelines for special events, bazaars, Carnivals, Circuses, Fairs, Festivals and other outdoor events regulated by the County Fire Marshal please see Guide Sheet #3 located on the County Building Services Website at "<http://www.catawbacountync.gov/depts/u&e/building.asp>".

[ ] **5.1 City of Conover Fire Department.** Please contact the Conover Fire Department at (828) 464-1295.

[ ] **5.2 City of Hickory Fire Prevention Bureau.** Please visit the Fire Prevention Bureau website to view general information and guidelines for festivals, carnivals, tents, membrane structures and similar events at "<http://www.hickorygov.com/fire/fireprevention/>".

[ ] **5.3 City of Newton Division of Fire Prevention.** Please visit the Division of Fire Prevention website to view Festival Fire Safety Regulations at "<http://www.newtonnc.gov/Departments/Fire/Safety.htm>".

[ ] **5.4 Stability.** Provide documentation that the structural stability of tents, canopies and their appurtenances will be adequately roped, braced and anchored to withstand the elements of wind, weather and prevent against collapse for tents & canopies permitted by the local fire department.

**6. Food Booth/Trailer/Concession Stands**

[ ] **6.1** The Catawba County Environmental Health Department has developed a brochure, "Temporary Food Establishment Requirements (PDF), En Espanol (PDF\*) Hmong (PDF\*)" to assist vendors in understand the requirements. This brochure can be obtained on the County Website at <http://www.catawbacountync.gov/phealth/tempfood.asp> .The brochure is available in English, Hmong and Spanish.