Electrical Requirements for Food Trucks

NEC Article 525

525.1 Scope:

This covers the installation of portable wiring and equipment for carnivals, circuses, fairs, and similar functions, including wiring in or on all structures.

525.2 Definitions:

Portable structures, units designed to be moved including, but not limited to, amusement rides, attractions, concessions, tents, trailers, trucks, and similar units.

525.5 Overhead Conductor Clearances:

Clearance to portable structures from overhead conductors ≤ 600V is 15 feet in any direction from the overhead conductors. Clearance from overhead conductors > 600V is a 15 foot hemisphere.

525.6 Protection of Electrical Equipment:

Equipment and wiring methods must have mechanical protection where they are subject to physical damage.

525.10 Services:

A) If accessible by unqualified persons, service must be locked.
B) Service shall be securely fastened to solid backing and protected from weather.

525.11 Multiple Sources of Supply:

Where multiple sources, or separately derived systems (generators) are used and separated by > 12 feet they shall be bonded together at the portable structure. The bond shall be properly sized, but not smaller than 6 AWG.

525.20 Wiring Methods:

A) Where flexible cords, or cables are used they shall be listed for extra hard usage. Where used and not subject to physical damage they may be listed for hard usage. Where used outside, all flexible cords or cables must be rated for wet locations and sunlight resistant.

B) Single conductor cable is permitted in sizes 2 AWG or larger only.

C) Open conductors are prohibited unless part of a listed assembly.

D) Splices are not permitted.

E) Cord connectors shall not be laid on the ground unless they are rated for wet locations. Connectors and cable connections shall not be placed in audience/customer traffic paths, or within publicly accessible areas unless guarded.

F) Wiring cannot be supported by another structure unless designed for that purpose.

G) Flexible cords and cables must be arranged to minimize tripping hazards and may be covered by a nonconductive matting providing a greater tripping hazard is not produced.

H) A box or fitting shall be installed at each connection point, outlet, switch point, or junction point.

525.21 Rides, Tents and Concessions:

A) Disconnecting Means: A means to disconnect each portable structure from all ungrounded conductors shall be provided.

B) Portable wiring: Electrical wiring shall be securely installed. Where subject to physical damage wiring shall be provided mechanical protection. All lamps for general illumination shall be protected from breakage.

525.22 Portable Distribution or Termination Boxes:

A) Boxes shall expose no live parts except for examination, adjustment, servicing, or maintenance by qualified personnel. Where installed outdoors, boxes shall be weather proof and not less than 6 inches above ground.

B) Busbars shall have an ampere rating not < the overcurrent device supplying the feeder for the box. Where conductors terminate directly on a busbar, busbar connectors shall be used.

C) Receptacles shall have overcurrent protection installed within the box and it shall not exceed the ampere rating of the receptacle, except as permitted by Art. 430, for motors.

D) Single pole connectors need to comply with 530.22.

525.23 GFCI Protection:

GFCI protection for personnel shall be provided on all 125V, single phase, 15 and 20 ampere non locking receptacles readily accessible to the public.

525.30 Grounding and Bonding:

The following equipment connected to the same source shall be bonded:

1) Metal raceways and metal sheathed cables
2) Metal electrical equipment enclosures
3) Metal frames and metal parts of portable structures, trailers, trucks, or other equipment that contain or support electrical equipment

The equipment grounding conductor of the supply circuit for the above items shall be permitted to serve as the bonding means.

525.31 Equipment Grounding:

All equipment to be grounded shall comply with Art. 250. The equipment grounding conductor shall be connected to the system grounded conductor at the service disconnect, or in the case of a generator, at the generator, or the first disconnect supplied by the generator. The grounded circuit conductor shall not be connected to the equipment grounding conductor on the load side.

525.32 Equipment Grounding Conductor Continuity:

Grounding conductor continuity shall be assured each time the portable electrical equipment is connected.

Plumbing Requirements for Food Trucks

International Plumbing Code

601.1 Scope:

This chapter shall govern the materials, design and installation of water supply systems, both hot and cold, for utilization in connection with human occupancy and habitation and shall govern the installation of individual water supply systems.

602.1 General:

Structures equipped with plumbing fixtures and utilized for human occupancy or habitation shall be provided with a potable supply of water in the amounts and at the pressures specified in this chapter.

602.2 Potable water required:

Only potable water shall be supplied to plumbing fixtures that provide water for drinking, bathing or culinary purposes, or for the processing of food, medical or pharmaceutical products. Unless otherwise provided in this code, potable water shall be supplied to all plumbing fixtures.

602.3.3 Water quality:

Water from an individual water supply shall be approved as potable by the authority having jurisdiction prior to connection to the plumbing system.

605.2 Lead content of water supply pipe and fittings:

Pipe and pipe fittings, including valves and faucets, utilized in the water supply system shall have not more than 8-percent lead content.

605.2.1 Lead content of drinking water pipe and fittings:

Pipe, pipe fittings, joints, valves, faucets and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372 and shall have a weighted average lead content of 0.25 percent or less.

605.3 Water service pipe:

Water service pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.3. Water service piping materials

not third-party certified for water distribution shall terminate at or before the full open valve located at the entrance to the structure.

605.3.1 Dual check-valve-type backflow preventer:

Dual check-valve backflow preventers installed on the water supply system shall comply with ASSE 1024 or CSA B64.6.

605.4 Water distribution pipe:

Water distribution pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.4. Hot water distribution pipe and tubing shall have a pressure rating of not less than 100 psi (690 kPa) at 180ºF (82ºC).