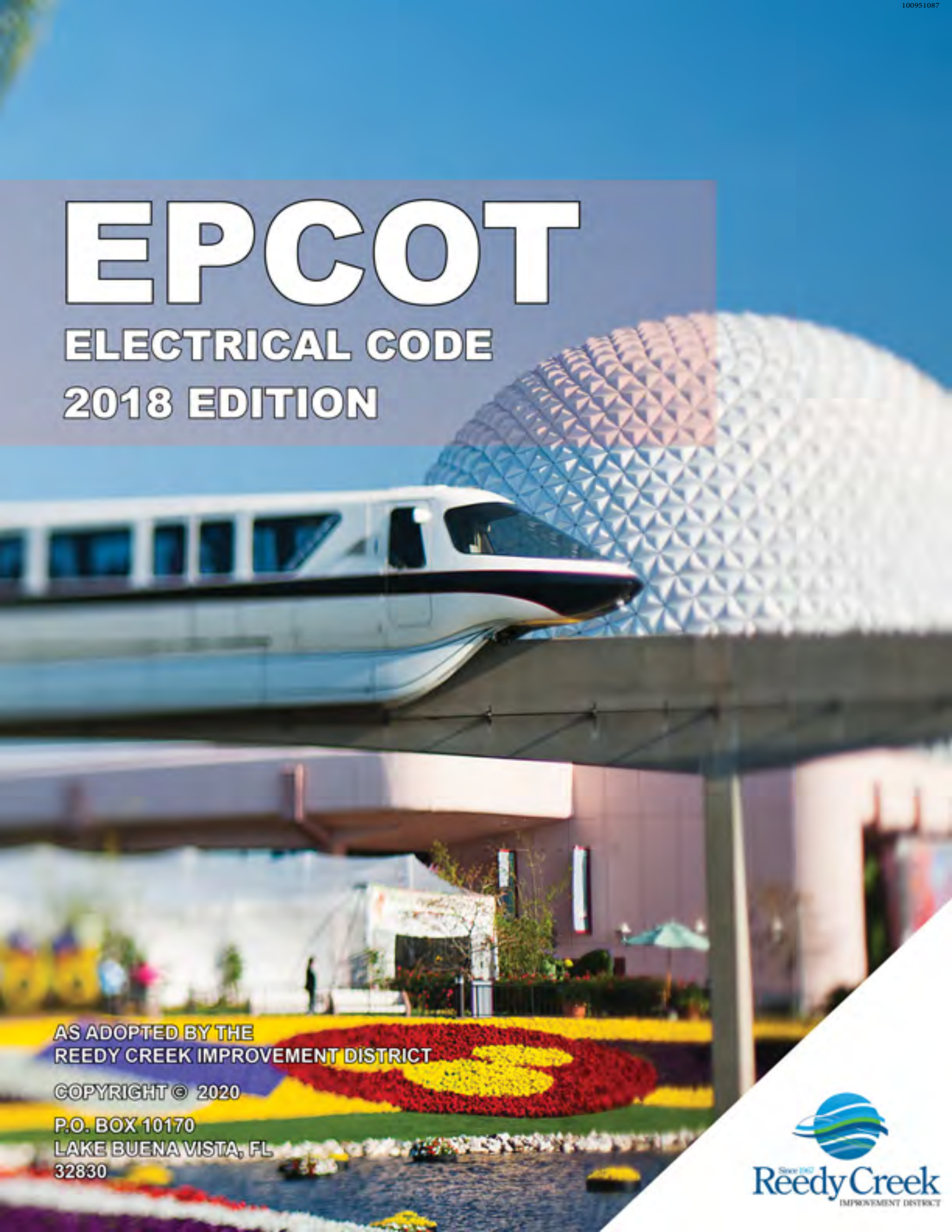
EPCOT

ELECTRICAL CODE

2018 EDITION



AS ADOPTED BY THE
REEDY CREEK IMPROVEMENT DISTRICT

P.O. BOX 10170
LAKE BUENA VISTA, FL
32830

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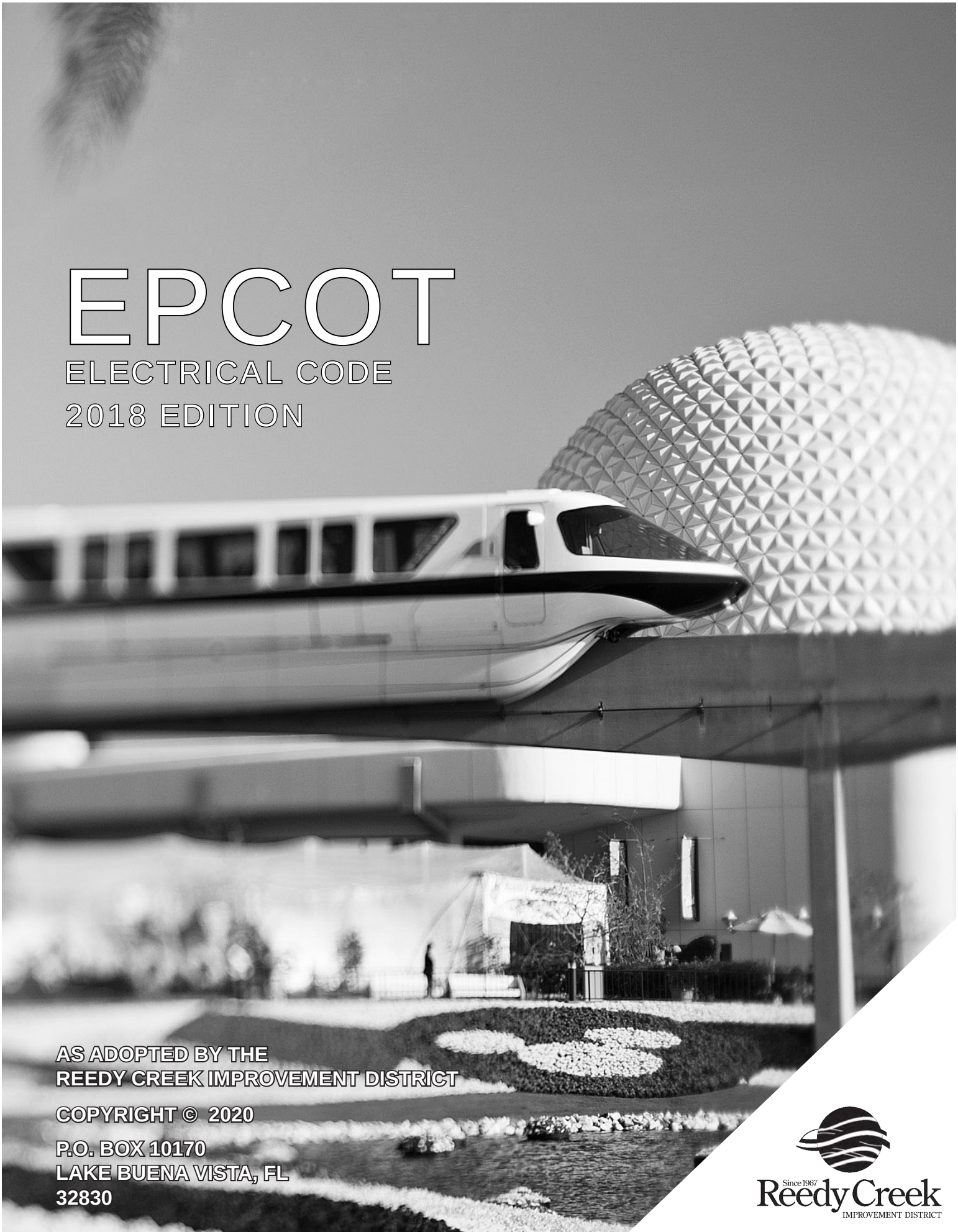
Reedy Creek
IMPROVEMENT DISTRICT



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INTERNATIONAL CODE COUNCIL®

EPCOT ELECTRICAL CODE
2018 EDITION

AS ADOPTED BY THE
REEDY CREEK IMPROVEMENT DISTRICT

SEVENTEENTH EDITION

P.O. BOX 10170
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PRINTED IN THE U.S.A

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ARTICLE 80
ADMINISTRATION

80.1 Scope. The provisions of this Code shall apply as set forth in Article 90.2 of the *National Electrical Code* (NEC).

80.2 Definitions. The following words and phrases, when used in this Code, shall have the meaning as indicated in this Section:

(a) **Chief Electrical Inspector.** The duly appointed individual who shall be responsible for the issuance of electrical permits and the inspection of all authorized work thereunder.

(b) **Electrical construction.** Installation, demolition, remodeling, repair or extension of any materials used in systems of electrical wiring for light, alarm, heat, power, signaling, remote control, power-limited, solar photovoltaic, electronic computer/data processing and/or communication circuits, and all equipment used in connection therewith.

(c) **Electrical Contractor.** A person, firm or corporation engaging in the business of electrical construction. The person in charge of the electrical installations for such person, firm or corporation shall be qualified as a master electrician according to the provisions of this Code, and shall possess a valid master electrician's Certificate of Competency.

(d) **National Electrical Code.** The *National Electrical Code*, 2014 Edition, as published by the National Fire Protection Association (NFPA) and further identified as ANSI/NFPA 70—2014 by the American National Standards Institute (ANSI).

80.3 Purpose. The purpose of this Code is to provide a uniform minimum standard regulating and providing requirements for safe and stable installations, methods of construction and uses of compatible materials in electrical wiring, apparatus or equipment used for light, heat, power, signal, remote control, power-limited and communication circuits. These rules and regulations are intended to be used in combination with the NEC, said code being hereby adopted and made a part of this Code as if fully set out herein. Where conflict in interpretation or intent are noted between this Code and the NEC, this Code shall be the governing document. New electrical systems, apparatus or parts thereof, or additions, alterations, repair or changes to existing systems or apparatus or equipment shall conform to the requirements of this Code.

80.4 Organization.

(a) **Creation of an Electrical Division.** There is hereby created in the Department of Building and Safety of the Reedy Creek Improvement District (the District), the Electrical Division, which shall be responsible to the Building Official.

(b) **Appointment of Chief Electrical Inspector.** The Building Official shall appoint a Chief Electrical Inspector. Such person shall have not less than 10 years experience in charge of installation and/or inspection of electrical construction. The Chief Electrical Inspector shall serve under the direction of the Building Official.

(c) **Restriction on employees.** No officer or employee connected with the Electrical Division shall be financially interested in the furnishing of labor, material or appliances for the construction, alteration or maintenance of electrical installations, or in the making of plans or of specifications therefore, unless he is the owner of such building. No such officer or employee shall engage in any work that is inconsistent with his duties or with the interests of the Department.

80.7 Title. The Chapters and Articles of this volume shall constitute and be known as the *EPCOT Electrical Code*.

80.8 Safety, responsibility and application.

(a) **Safety.** All electrical equipment shall be so constructed, installed, protected, operated and maintained that said electrical equipment will be to such extent as is reasonably possible, safe and free from danger of accident or injury by shock, fire or otherwise to either person or property.

(b) **Responsibility.** This Code shall not be construed to relieve from or lessen the responsibility of any party owning, operating, controlling or installing any electric wiring, electric devices or electric material for damages to person or property caused by any defect therein, nor shall the jurisdiction be held as assuming any such liability by reason of any inspection authorized herein, or Certificate of Inspection issued as herein provided.

(c) **Application.** All provisions and requirements of all Articles, Sections and Subsections of the NEC, which are not herein expressly amended or superseded, shall be deemed to be in full force and effect; and if there is not contained herein any specific reference to any electrical work or equipment or other matter covered by the NEC, then the applicable requirements of said code, with respect to such electrical work or equipment or other matter, shall be complied with.

80.13 Powers and duties of the Chief Electrical Inspector.

(a) **Inspection and enforcement.** It shall be the duty of the Chief Electrical Inspector to inspect all electrical construction within the limits of the District, and to enforce the rules and regulations of this Code.

(b) **Right of entry.** Whenever necessary to make an inspection to enforce the requirements of this Code, and/or whenever the Chief Electrical Inspector has reason to believe that there exists in any building or on any premises electrical construction that creates an unsafe condition, the building or premises shall be made accessible at reasonable times to inspect the installation or to perform a duty imposed by this Code. If the building or premises is occupied, the Chief Elec-

trical Inspector shall first present his credentials and request entry. If entry is refused, he shall report that fact to the Building Official who shall determine what action is to be taken under the requirements of the *EPCOT Building Code*.

(c) **Stop work orders.** Whenever any work is being done contrary to the provisions of this Code, or is being done in any unsafe or dangerous manner, the Chief Electrical Inspector may order such work stopped or may order the violation corrected by notice, in writing, served on the person(s) engaged in doing or causing such work to be done. Such person(s) shall immediately stop the work until authorized to resume such work by the Chief Electrical Inspector.

(d) **Authority to condemn electrical construction.** Whenever the Chief Electrical Inspector learns that an electrical system or equipment regulated by this Code has become hazardous to life, health or property, he shall order, in writing, that the electrical system or equipment be removed or corrected. No person shall use or maintain defective equipment after written notice has been received from the Chief Electrical Inspector. Failure to comply with the notice shall cause the system to be abated in accordance with the procedure established in the *EPCOT Building Code*.

(e) **Unsafe or dangerous wiring.** The Chief Electrical Inspector or his designated representative is hereby empowered to inspect or reinspect all wires and apparatus conducting or using electrical current for light, heat, power, signaling, remote control, power-limited, communication circuits, and when conductors or apparatus are found to be unsafe to life or property, he shall notify the owner of the premises to place the same in a safe and secure condition within 24 hours or within such further time as the Chief Electrical Inspector shall reasonably determine is necessary. Whenever any wiring, apparatus or fixture conducting or using current for light, heat, power, signaling, remote control, power-limited and communication circuits is found to be especially or immediately hazardous to life and/or property, the Chief Electrical Inspector shall post in a conspicuous place near such switches or circuit breakers a notice, printed in red letters, as follows:

"**Notice—wiring condemned.** The use of electric current is prohibited through this wiring or equipment until proper repairs have been made and approved by the Chief Electrical Inspector. Repairs must be made under a master electrician's supervision, and the Chief Electrical Inspector must be notified when completed." After such notice is posted, no person shall close the switch or circuit breaker that has been opened by the Chief Electrical Inspector, or use or attempt to use any current through such wiring, apparatus or fixture that has been condemned until necessary repairs have been made and approved by the Chief Electrical Inspector. The Chief Electrical Inspector may also notify the utility company to disconnect the service.

(f) **Alternative materials and systems of construction.**

1. **Alternatives permitted.** The requirements of this Code are not intended to prevent the use of systems, materials or methods of design or installation as alternatives to the standards specified in this Code. Such alternatives may be offered for approval and their consideration shall be in accordance with the requirements of Section 204 of the *EPCOT Building Code*.
2. **Testing.** The Chief Electrical Inspector shall require that documented proof be submitted to substantiate a claim made regarding the use of alternative materials, systems or methods of design or installation. Whenever there is insufficient evidence to substantiate such claim, the Chief Electrical Inspector may require tests in accordance with the requirements of Subsection 204.4 of the *EPCOT Building Code*.
3. **Modifications.** In cases where installation problems or conditions arise that were clearly not contemplated in the making of these regulations and that make literal application manifestly impractical, the Building Official may, by special permission in writing and in advance, allow such modification of the detailed requirements of such rule as may be justified by the conditions, provided the work is done in accordance with the spirit and intent of the rule and in such manner as to afford an equal or greater degree of safety.

(g) **Requirements not covered by Code.** Any requirements necessary for the safety or stability of an existing or proposed building, structure or other electrical installation, or the occupants/users thereof, not specifically covered by this Code, shall be determined by the Chief Electrical Inspector.

(h) **Interference with electrical inspections.** It shall be unlawful for any person to hinder or interfere with the Chief Electrical Inspector or his designated representative in the discharge of his duties under the provisions of this Code.

80.15 Board of Appeals.

(a) **Creation of the Board Of Appeals.** The Board of Appeals established by the *EPCOT Building Code* shall serve as the Board of Appeals when requests for use of alternative materials, systems or methods of design or installation of electrical wiring, devices or equipment for light, heat or power have been rejected by the Chief Electrical Inspector. The same Board of Appeals shall provide a reasonable interpretation of this Code when an appeal from the decision of the Chief Electrical Inspector has been filed.

80.18 Electrical Contractors.

(a) **Qualification requirements.** Prior to engaging in the business of electrical contracting within the District, a person, firm or corporation shall satisfy the Chief Electrical Inspector that he is or has in his employ a properly registered or certified Electrical Contractor.

(b) **Certification/registration.** Electrical Contractors shall be properly registered with or certified by the Florida Electrical Contractors Licensing Board, and all certified shall possess a current Orange County Certificate of Competency.

(c) **Identification.** The Electrical Contractor may be the company owner, proprietor, an employee or corporation officer, but shall, in all cases, be the person who is directly responsible for the physical and mechanical manner in which electrical construction is performed.

(d) **Responsibility.** Each electrical permit application shall be signed by an Electrical Contractor. The same Electrical Contractor shall directly supervise and be responsible for all electrical construction authorized by such permit.

(e) **Termination of responsibility.** An Electrical Contractor may be relieved from his responsibilities under any permit signed by him after written notice is filed with the Chief Electrical Inspector and prior to the completion of electrical construction covered by said permit. When the Electrical Contractor terminates his services voluntarily or otherwise, it shall be his responsibility to notify the Chief Electrical Inspector within 24 hours, exclusive of Saturdays, Sundays and holidays.

(f) **Use of name.** It shall be unlawful for an Electrical Contractor to allow his name to be used by any person or party, directly or indirectly, either for the purpose of obtaining a permit or to do any work under his license that he will not directly supervise.

(g) **Supervision.** All electrical construction shall be supervised by the responsible Electrical Contractor whose name appears on the electrical permit for such work.

80.19 Permits and approvals.

(a) **Permit required.** No person, firm or corporation shall install or remove any wiring or devices, or equipment for heat, light, power, signaling, remote control, alarm, solar photovoltaic systems, power-limited, electronic computer/data processing equipment and/or communication circuits, for temporary or permanent purposes, within the District, or cause the same to be done, without first obtaining from the Department of Building and Safety an electrical permit for such work. Application shall be submitted to the Department of Building and Safety on a form provided by the District and shall bear the signature of the Electrical Contractor who will be directly responsible for the work. The application shall be accompanied by two complete sets of plans, specifications and schedules as may be necessary to determine whether the installation, as described, will be in compliance with the requirements of this Code.

(b) **Inspections.** The following paragraphs indicate those phases of electrical construction for which there are required inspections. It shall be the responsibility of the Electrical Contractor whose name appears on the electrical permit to notify the office of the Chief Electrical Inspector for these inspections. A period of 24 hours, exclusive of Saturdays, Sundays and holidays, will be required from the time the request is made in which to perform the inspection and report.

1. **Electrical underground.** When conduit and/or conductors are buried or conduit is encased in foundations or slabs (i.e., buried perimeter grounds and their connections; driven ground rods; PVC installations; conduit and outlet boxes in poured slabs, walls, ceilings, etc.), all rebar, plumbing and other piping or tube work shall be in place on work to be concealed before the electrical work is inspected, and no such work shall be considered as complete until all such plumbing or piping is in place. Upon making an inspection of any electrical work or equipment, when the same is found to have been installed in a satisfactory manner and in accordance with the provisions of this Code, the Chief Electrical Inspector shall sign the inspection record card that the electrical work herein inspected was found to be in accordance with the provisions of this Code. It shall be unlawful to lath, seal or in any manner conceal any electrical work or equipment until the same has been inspected and the permit card signed as herewith required. It shall be unlawful to cover or fill any switch or outlet box with plaster, cement or other materials.
2. **Rough-in (raceways).** When all conduit, pull boxes, fittings, empty panelboards, etc., have been mounted and prior to the pulling of any conductors.
3. **Rough-in (wiring).** After all conductors have been pulled and panelboards have been fitted out, including load centers, motor control centers, motor starters, time clocks, distribution and/or lighting and appliance panelboards, etc. All lighting fixture boxes, receptacle boxes and switch boxes shall be empty with a minimum of 6-inch lengths of the required conductors exposed in each. In all cases, these conductors shall be of sufficient length to readily make a positive identification of all required conductor jacketing information.
4. **Final electrical.** Final inspection shall be made upon completion of the job with all fixtures, fuses, wiring, receptacles, switches, lamps, etc., in place. It shall be the responsibility of the Electrical Contractor whose name appears on the electrical permit to insure that any electrical installation is not energized until the installation has passed final inspection by the Chief Electrical Inspector.
5. **Progress inspections.** The inspection procedure outlined in this Article represents an ideal situation. However, numerous area inspections may be required and shall be requested when necessary as construction progresses, so as to prevent any work from being covered without inspection.

(c) **Expiration.** A permit issued under the provisions of this Code shall expire by limitation and become null and void when the work covered by the permit has not been started within 180 days from the date of issuance of the permit; or when the work is suspended or abandoned at any time for 180 days. Before such work can proceed, a new permit shall first be obtained in accordance with the requirements of this Section and a fee shall be paid in the amount of the original total permit fee.

(d) **Suspension or revocation.** The Chief Electrical Inspector may, in writing, suspend or revoke a permit issued under the provisions of this Code when the permit has been issued in error or was based on incorrect information supplied by the applicant, or when the work being done is in violation of the requirements of this Code, the *EPCOT Building Code* or the Land Use Regulations of the District.

80.21 Approval of plans and specifications.

(a) **Applicable regulations.** When plans and specifications have been approved, the issuance of a permit shall not prevent the Chief Electrical Inspector from hereafter requiring correction of errors in such plans and specifications or from preventing electrical installations being made thereunder in violation of this Code or of any other regulations of the District applicable thereto. Compliance with this Code is the responsibility of the owner or his authorized agent.

(b) **Required information.** All electrical plans shall include a one-line riser diagram showing wire sizes and types, conduit sizes and types, distances and fault currents available at all panels, transformers, motor control centers and main service equipment.

80.23 Notice of violations, penalties.

(a) **Violations and penalties.** A person, firm, corporation or agent who shall violate any requirement of this Code, or who shall fail to comply therewith, or who shall install, alter, repair, remove or maintain equipment regulated by this Code in violation of a detailed statement or drawing submitted and approved by the Chief Electrical Inspector, shall be guilty of a misdemeanor and shall be subject to the penalty provided in Section 67-764, Laws of Florida, Special Acts of 1967.

80.29 Liability. An officer or employee of the District charged with the enforcement of this Code shall not thereby render himself personally liable and he is hereby relieved from all personal liability for any damage that may accrue to persons or property as a result of an act required or permitted in the discharge of his duties, in accordance with the *EPCOT Building Code*.

80.31 Validity. If any Section, Subsection, sentence or phrase of this Code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of remaining parts of this Code.

CHAPTER 1

GENERAL

ARTICLE 110
REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

110.1 See Subsections 503.7(f) and 805.9, and EPCOT Standard 5-12 of the *EPCOT Building Code*; Subsection 505.15 of the *EPCOT Mechanical Code*; and Section 610 of the *EPCOT Fuel Gas Code*.

110.2 Electrical equipment room.

(a) **Equipment.** The electrical equipment room is dedicated to disconnecting means, meter(s), time clocks, step-down transformers, panelboards, etc. No other equipment, except a telephone terminal board that must be in a separate area from the electrical equipment, shall be allowed in this room.

(b) **Storage.** There shall be no storage in this room, and a durable, waterproof sign with letters not less than $^1/_2$ inch high shall be mounted on the outside of the door reading: "ELECTRICAL EQUIPMENT ROOM—NO STORAGE PERMITTED."

CHAPTER 2
WIRING AND PROTECTION

ARTICLE 210
BRANCH CIRCUITS

210.1 Minimum number of receptacle outlets. Offices less than 100 square feet shall have a minimum of one outlet. Offices larger than 100 square feet shall have a minimum of one outlet on each of two opposing walls.

210.2 Stairway lighting. Stairway lighting shall be controlled by 3- or 4-way switches located at the top and bottom of the stairway, except in multiple dwellings or apartments, or other public buildings where the stair lighting is controlled on special hall, corridor or house circuits that are energized at all hours of darkness (see Artcle 404.2 of the NEC).

ARTICLE 225
OUTDOOR WIRING AND EQUIPMENT

225.1 Minimum mounting height. Panelboards, disconnects, switches and similar electrical equipment installed outdoors shall be at least 24 inches above finished floor measured from the bottom of the cabinet.

225.2 Overhead wiring. Overhead power lines shall only be allowed for temporary installation with prior, written approval of the Chief Electrical Inspector in each case.

ARTICLE 230
SERVICES AND FEEDERS

230.1 Power distribution. Since the characteristics of the service available in different localities within the District may vary, it is recommended that the responsible design personnel contact the utility company and verify location and type of power available at any specific site, prior to preparation of construction documents.

230.2 Change load. On all wiring installations where an increase or decrease of load beyond the approved designed capacities is to be made, the utility company shall be notified before the change occurs.

230.3 Energizing circuits. A sticker, bearing the approval of the Department of Building and Safety, shall be placed upon the main disconnect housing before any electrical circuits, temporary or permanent, may be energized.

230.4 Service point. The point-of-service entrance to buildings shall be determined by the serving utility, or public service corporation or agency.

230.5 Meters owned by the utility company. In no case shall an electrical meter owned and installed by the utility company be removed or changed by anyone other than a representative of that company.

230.6 Main disconnects.

(a) **Residential buildings.** A fused main disconnect switch or circuit breaker with a minimum rating of 100 amperes shall be installed on the exterior of the building, or in a utility room or garage.

(b) **Small residential buildings.** For residences not exceeding 600 square feet of living area and loads not exceeding 5,000 volt-amps, based on 200 volt-amps per 120-volt current consuming outlet, plus maximum volt-amps for direct connected loads, the minimum may be 60 amps and the service conductors not less than 6 American Wire Gauge (AWG) copper or equal ampacity.

(c) **Commercial buildings.** A fused main disconnect switch or circuit breaker with a minimum rating of 100 amperes shall be installed on the outside of the building as near the point of entrance of service conductors as possible considering the type of building and accessibility in case of fire or other reason for opening the service switch and disconnecting the building. Upon special application to the Chief Electrical Inspector, before any work is started, written approval may be granted for the meter and mains to be installed inside the building, if accessible and available for meter reading, servicing and disconnecting in case of emergencies.

(d) **Interior disconnects.** On all buildings, except one- and two-family dwellings, if the main switch is not readily apparent on the exterior of the building, a shunt trip switch shall be installed on the exterior of the building mounted at 7 feet above the finished floor or grade. This requirement shall also apply to buildings served by feeders. The shunt trip switch shall be properly identified by a reasonable sign constructed of permanent materials with not less than 2-inch-high letters.

(e) **Concession carts.** Each concession cart shall have a shunt trip button or other disconnecting means within 6 feet of the operator's station. Pressing the button or opening the switch shall disconnect the electrical supply to the cart.

230.7 Grounded service required. All service conductors shall include a grounded conductor from the point of service to the service disconnecting means.

230.8 Tap. No conductor shall be tapped off of the service entrance conductors ahead of the main overcurrent protective device on a structure without prior written permission from the Chief Electrical Inspector.

ARTICLE 250
GROUNDING AND BONDING

250.1 Grounding conductors. An equipment grounding conductor shall be installed within all feeder and branch circuit raceways. The size of the conductor shall not be less than given in Table 250-122 of the NEC.

CHAPTER 3
WIRING METHODS AND MATERIALS

ARTICLE 300
FLEXIBLE CONDUIT

300.1 Restriction. Flexible conduit longer than 6 feet in length may be used only with the prior written approval of the Chief Electrical Inspector.

ARTICLE 310
CONDUCTORS

310.1 Color code. The ungrounded conductors of the different voltage systems in the following list shall be identified by using colored wire insulation with the following colors: 120 volts, single phase, 2 wire: black 240/120 volts; single phase, 3 wire: black and red 480/240 volts; single phase, 2 wire: brown and yellow 240 volts; 3 phase, 3-wire delta: black, red and blue 240/120 volts; 3 phase, 4 wire, high-leg delta: black, red and orange (high-leg) 208Y/120 volts; 3 phase, 4 wire: black, red and blue 480Y/277 volts; 3 phase, 4 wire: brown, orange and yellow 480 volts; 3 phase, 3-wire delta: brown, orange and yellow. The grounded conductor for the 120-, 208-, 240-volt system shall be white, and for the 480-, 277-volt systems shall be gray. Switch legs may be any other color, except those specified for other voltage classifications, and grounded and grounding conductors. AWG sizes four and larger may be identified by means of colored tape or other permanent and substantial means of color coding.

310.2 Identification. Prior to installation of conductors, means shall be provided to ensure that conductor ends are identified at each end as phase, grounded or grounding conductors. Prior to energizing conductors, verification that each conductor is identically identified at each end shall be required.

ARTICLE 352
RIGID NONMETALLIC CONDUIT

352.1 Limitation. Rigid nonmetallic conduit is the only raceway or conduit that shall be permitted to be installed in direct contact with earth, or in areas subject to severe corrosive influences (see Article 300.6 of the NEC).

ARTICLE 358
ELECTRICAL METALLIC TUBING

358.1 Restriction. Electrical metallic tubing shall not be used in unsuspended concrete slabs on ground floors, underground, or in Class I, II or III hazardous locations as defined in the NEC.

ARTICLE 362
ELECTRICAL NONMETALLIC TUBING

362.1 Expanded scope. The use of electrical nonmetallic tubing (ENT) shall be allowed in those areas covered by Articles 518 and 520 of the NEC, provided the installation is in accordance with Article 362 of the NEC.

ARTICLE 398
OPEN WIRING ON INSULATORS

398.1 Limited use. Article 398 of the NEC in its entirety will apply only for temporary construction or for special purposes approved, in writing, by the Chief Electrical Inspector prior to issuance of construction permit.

CHAPTER 4
EQUIPMENT FOR GENERAL USE

ARTICLE 404
SWITCHES

404.1 Wall switches in bathrooms. Wall switches will be permitted within reach of a bathtub or shower if no other place in the bathroom is suitable as long as the switch is not placed within the area of the tub or shower. Metal pull chains are prohibited in these locations. Receptacles are not permitted within reach from bathtub and shower.

ARTICLE 408
SWITCHBOARDS AND PANELBOARDS

408.1 Electric fused switches, switchboards and panelboards. Electric fused switches, switchboards and panelboards shall not be permitted to be installed in any private bathroom or public restroom.

ARTICLE 410
LIGHTING FIXTURES

410.1 Inspection sequence. Provisions for compliance with Article 410.66 of the NEC shall be verified at the time of rough-in inspection.

ARTICLE 422
APPLIANCES

422.1 Multiple feeds to equipment. Where any electrical equipment receives electrical energy from more than one source, it shall be provided with disconnecting means from each source of electrical energy immediately adjacent to the equipment served. All electrical equipment connected from more than one source of electrical energy shall have permanent signs affixed with letters not less than $^1/_2$ inch high, reading: "DANGER THIS EQUIPMENT HAS MORE THAN ONE SOURCE OF POWER."

ARTICLE 430
MOTORS

430.1 Motor disconnect location. Section 430.102 of the NEC, "Motor Not in Sight from Controller," shall be amended as follows: Where a motor and the driven machinery are not in sight from the controller location, a manually operable switch or a controller disconnecting means capable of being locked in the open position that will disconnect the motor and the driven machinery control equipment from its source of supply shall be placed within sight from the motor location. "Within sight" shall be interpreted the same as Article 440.1.

ARTICLE 440
HEATING, AIR CONDITIONING AND REFRIGERATION

440.1 Disconnecting means. A disconnecting means shall be installed within sight and readily accessible, in the ungrounded leads of each power circuit to all electric furnaces, duct heaters, compressors, condensing units and air- handling units. A light outlet with fixture and guarded lamp, and a duplex receptacle shall be installed within 3 feet of the servicing side of heating and air-conditioning equipment in low attics, crawl spaces and isolated equipment spaces where mechanical equipment will need servicing and there are no other easily reachable sources of light and power receptacles. Where roof-mounted mechanical equipment is installed, no light fixture is required. For roof-mounted units, a duplex receptacle shall be within 25 feet of the service side of all units. For the purpose of this Code, "within sight" is interpreted to be visible within 50 feet, and "readily accessible" is interpreted to be capable of being reached quickly for operation, renewal or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, chairs, etc., as referenced in Article 100 of the NEC, Definitions.

ARTICLE 450
TRANSFORMERS

450.1 Ratings. Prior to the installation of any power transformer used for lighting and general receptacle use, documentation shall be provided to the Chief Electrical Inspector that the transformer is suitable for the usage. Especially taking into account nonlinear loads and the required "K" rating of transformers as referenced in Articles 110.3 and 110.10 of the NEC.

CHAPTER 5
SPECIAL OCCUPANCIES

ARTICLE 590
TEMPORARY INSTALLATION PERMITS

590.1 Permit required. An electrical permit shall be required for each temporary installation and all associated electrical wiring. Application shall be made to the Department of Building and Safety and shall state the size, the proposed use, the location, and bear the signature of the responsible Electrical Contractor. The permit shall be posted at the power source or the first disconnecting means enclosure.

590.2 Duration. Temporary installations shall be permitted for a specified period of time, not to exceed 90 days unless specifically authorized in writing by the Chief Electrical Inspector.

590.3 Identification. All portable temporary electrical equipment shall be clearly labeled, so as to identify the owner or party responsible for the installation and condition of the equipment.

590.4 New construction. Temporary power for structures under construction shall be subject to the following restrictions. Violations of any of the restrictions shall result in the immediate termination of power.

(a) **Complete installation.** The electrical distribution system shall be substantially completed. All panels and overcurrent devices shall be installed, and all conductors pulled and terminated.

(b) **Lockable equipment.** All panels not in equipment rooms shall have lockable covers or enclosures.

(c) **Keys to equipment.** Only the Electrical Contractor holding the permit for the job may have keys to the equipment rooms or panels. The owner and/or general contractor shall not have access to these areas once power is turned on.

(d) **Supervised access.** Should it be necessary for personnel who are not employees of the Electrical Contractor to have access to an equipment room or panel, one of the Electrical Contractors' personnel shall be in the room at all times when any work is performed in the electrical room.

(e) **Restricted/controlled access.** Electrical equipment rooms and energized panels shall be kept closed and locked at all times when Electrical Contractors' personnel are not in the room.

(f) **Liability.** The Electrical Contractor understands that he assumes full liability for any hazards, damages or injuries caused by the power being on, and that the District assumes no liability for the power or any damages that may result from the use thereof.

(g) **Request form.** Written request for temporary power on the structure shall be made on a form provided by the District and signed by the designated parties, including the Electrical Contractor, owner and general contractor, stating they understand the requirements of this Code.

CHAPTER 6
SPECIAL EQUIPMENT

ARTICLE 600
ELECTRIC SIGNS AND OUTLINE LIGHTING

600.1 Listing. Any sign or device containing neon or neon components shall be listed by an approved testing laboratory. All portions of UL 48, and Articles 410 and 600 of the NEC shall be followed for any device using neon lighting.

ARTICLE 680
SWIMMING POOLS, FOUNTAINS AND SIMILAR INSTALLATIONS

680.1 Lighting fixtures. Article 680.20 of the NEC is amended as follows: Paragraphs (a) through (c) of this Section apply to all lighting fixtures installed below the normal water level of the pool. All lighting fixtures shall be installed for operation at 15 volts or less between conductors.

680.2 Emergency switch for spas and hot tubs. Article 680.41 of the NEC, Exception: An emergency switch for spas and hot tubs shall not be required for gravity feed systems that do not present entrapment hazards and that comply with Florida Administrative Code 64E-9.

CHAPTER 7
SPECIAL CONDITIONS

ARTICLE 700
EMERGENCY SYSTEMS

700.1 Emergency lighting. Emergency lighting and/or exit lights shall be installed where designated by the Building Official as set forth in the *EPCOT Building Code* and must conform with Article 700 of the NEC. Every building that is required to have emergency lighting systems shall be tested and inspected annually by the District, the Department of Building and Safety, and the Reedy Creek Department of Emergency Services.

700.2 Dimmers. Egress illumination (emergency lighting) required by Subsection 813.2 of the *EPCOT Building Code* may be controlled by switches and/or dimmers when approved by the Building Official in accordance with this Article. When approved, in addition to the requirements of this Article, all of the following shall apply:

(a) Dimmers and/or switches shall be automatically overridden with loss of normal power and/or with any fire alarm activation,

(b) Dimmer system shall not automatically reset after activation. A manual reset feature shall be provided,

(c) An engineering analysis is required for the devices used to ensure proper operation and compatibility.

Exception: Switches permitted in NEC Article 700.21.

700.3 Dimmer system. A dimmer system containing more than one dimmer and listed for use in emergency systems may be permitted in accordance with Article 700.2 to be used as a control device for energizing emergency lighting circuits. On failure of normal power and activation of any fire alarm initiating device, the dimmer system shall be permitted to energize those circuits required to provide emergency lighting levels established by the *EPCOT Building Code*. All branch circuits supplied by the dimmer system cabinet shall comply with the wiring methods of Article 700 of the NEC.

ARTICLE 705
INTERCONNECTED ELECTRIC POWER PRODUCTION SOURCES

705.1 Current supplied from private sources. All wiring or apparatus for light, heat or power in premises of any nature that is to be supplied with current from a private source, furnished by means of generator sets or otherwise, may be arranged and connected so as to operate on any approved system of wiring, whether AC or DC, two, three or four wire, subject to all provisions of this Code, and subject to the provision that such wiring, arrangement and connection shall be compatible with the utility company.

ARTICLE 760
FIRE ALARM SYSTEMS

760.1 Surge arresters. All fire alarm panels shall have a surge arrester installed to protect the system. The device shall be listed and labeled by a nationally recognized testing laboratory.

760.2 Submittals. All contractors, individuals or corporate entities installing any alarm system of any type (fire, burglar, security, equipment sensors) shall furnish to the District the following information prior to the issuance of a permit: Drawings for the system, documentation of the listing by an approved third-party testing agency of the system components and the system as a complete unit. Final inspection will not be made until the Chief Electrical Inspector has witnessed an operational test of the system, inspected the installation and received as designed drawings of the system.

760.3 Color coding. All raceways and junction/pull boxes containing fire alarm circuits shall be painted red and the box covers shall be clearly and permanently marked "F/A."