

CHAPTER 27

ELECTRICAL

SECTION 2701 GENERAL

2701.1 Scope. This chapter governs the electrical components, equipment and systems used in buildings and structures covered by this code. Electrical components, equipment and systems shall be designed and constructed in accordance with the provisions of NFPA 70.

[F] SECTION 2702 EMERGENCY AND STANDBY POWER SYSTEMS

[F] **2702.1 Installation.** Emergency and standby power systems required by this code or the *Fire Code* shall be installed in accordance with this code, NFPA 110 and 111.

Exception: Fuel supply requirements of NFPA 110, Section 5.1.2 may be reduced, when approved by the building official, based on the operational needs and uses of the facility served by the emergency or standby power system.

[F] **2702.1.1 Stationary generators.** Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200.

[F] **2702.2 Where required.** Emergency and standby power systems shall be provided where required by Sections 2702.2.1 through 2702.2.20.

[F] **2702.2.1 Group A occupancies.** Emergency power shall be provided for emergency voice/alarm communication systems in Group A occupancies in accordance with Section 907.5.2.2.4.

[F] **2702.2.2 Smoke control systems.** Standby power shall be provided for smoke control systems in accordance with Section 909.11.

[F] **2702.2.3 Exit signs.** Emergency power shall be provided for *exit* signs in accordance with Section 1011.5.3.

[F] **2702.2.4 Means of egress illumination.** Emergency power shall be provided for *means of egress* illumination in accordance with Section 1006.3.

[F] **2702.2.5 Accessible means of egress elevators.** Standby power shall be provided for elevators that are part of an *accessible means of egress* in accordance with Section 1107.1.

[F] **2702.2.6 Accessible means of egress platform lifts.** Standby power in accordance with this section or ASME A 18.1 shall be provided for platform lifts that are part of an *accessible means of egress* in accordance with Section 1007.5.

[F] **2702.2.7 Horizontal sliding doors.** Standby power shall be provided for horizontal sliding doors in accordance with Section 1008.1.4.3.

[F] **2702.2.8 Semiconductor fabrication facilities.** Emergency power shall be provided for semiconductor fabrication facilities in accordance with Section 415.8.10.

[F] **2702.2.9 Membrane structures.** Standby power shall be provided for auxiliary inflation systems in accordance with Section 3102.8.2. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with the *Fire Code*.

[F] **2702.2.10 Hazardous materials.** Emergency or standby power shall be provided in occupancies with hazardous materials in accordance with Section 414.5.4.

[F] **2702.2.11 Highly toxic and toxic materials.** Emergency power shall be provided for occupancies with highly *toxic* or *toxic* materials in accordance with the *Fire Code*.

[F] **2702.2.12 Organic peroxides.** Standby power shall be provided for occupancies with silane gas in accordance with the *Fire Code*.

[F] **2702.2.13 Pyrophoric materials.** Emergency power shall be provided for occupancies with silane gas in accordance with the *Fire Code*.

[F] **2702.2.14 Covered mall buildings.** Standby power shall be provided for voice/alarm communication systems in *covered mall buildings* in accordance with Section 402.14.

[F] **2702.2.15 High-rise buildings.** Emergency and standby power shall be provided in high-rise buildings in accordance with Sections 403.4.7 and 403.4.8.

[F] **2702.2.16 Underground buildings.** Emergency and standby power shall be provided in underground buildings in accordance with Sections 405.8 and 405.9.

[F] **2702.2.17 Group I-3 occupancies.** Emergency power shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

[F] **2702.2.18 Airport traffic control towers.** Standby power shall be provided in airport traffic control towers in accordance with Section 412.3.5.

[F] **2702.2.19 Elevators.** Standby power for elevators shall be provided as set forth in Sections 3003.1, 3007.7 and 3008.15.

[F] **2702.2.20 Smokeproof enclosures.** Standby power shall be provided for smokeproof enclosures as required by Section 909.20.6.2.

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[F] **2702.2.21 Group I-2.** Automatic emergency power and/or standby power supplies shall be provided for all health care facilities, as defined in NFPA 99. The approved alternative power supply shall maintain operating energy to the facility for a period of not less than 90 minutes. Emergency and standby power supplies shall be installed as required in the *Electrical Code* and in accordance with NFPA 99.

[F] **2702.3 Maintenance.** Emergency and standby power systems shall be maintained and tested in accordance with the *Fire Code*.