

**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 and includes specific requirements for when emergency or standby power is required. Electrical components, equipment and systems shall be designed and constructed in accordance with the applicable provisions of 527 CMR 12.00.

SECTION 2702 EMERGENCY AND STANDBY POWER SYSTEMS

2702.1 Installation. Emergency and standby power systems shall be installed in accordance with 527 CMR 12.00, 527 CMR 27.00, NFPA 110 and NFPA 111.

2702.1.1 Stationary generators. Emergency and standby power generators shall be listed in accordance with UL 2200 (see 3XX CMR relative to air quality control regulations associated with point source generation).

2702.2 Where required. Emergency and standby power systems shall be provided where required by Sections 2702.2.1 through 2702.2.19 (also see 780 CMR, 914.3).

2702.2.1 Group A occupancies. Emergency power shall be provided for voice communication systems in Group A occupancies in accordance with 780 CMR 907.2.1.2.

2702.2.2 Smoke control systems. Standby power shall be provided for smoke control systems in accordance with 780 CMR 909.11.

2702.2.3 Exit signs. Emergency power shall be provided for exit signs in accordance with 780 CMR 1011.5.3.

2702.2.4 Means of egress illumination. Emergency power shall be provided for means of egress illumination in accordance with 780 CMR 1006.3.

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 780 CMR 1007.4.

2702.2.6 Horizontal sliding doors. Standby power shall be provided for horizontal sliding doors in accordance with 780 CMR 1008.1.3.3.

2702.2.7 Semiconductor fabrication facilities. Emergency power shall be provided for semiconductor fabrication facilities in accordance with 780 CMR 415.9.10.

2702.2.8 Membrane structures. Standby power shall be provided for auxiliary inflation systems in accordance with 780 CMR 3102.8.2. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with the International Fire Code.

2702.2.9 Hazardous materials. Emergency or standby power shall be provided in occupancies

with hazardous materials in accordance with 780 CMR 414.5.4.

2702.2.10 Highly toxic and toxic materials. Emergency power shall be provided for occupancies with highly toxic or toxic materials in accordance with the *International Fire Code*.

2702.2.11 Organic peroxides. Standby power shall be provided for occupancies with silane gas in accordance with the *International Fire Code*.

2702.2.12 Pyrophoric materials. Emergency power shall be provided for occupancies with silane gas in accordance with the *International Fire Code*.

2702.2.13 Covered mall buildings. *Standby power shall be provided for voice/alarm communication systems in covered mall buildings in accordance with 780 CMR 402.12.*

2702.2.14 High-rise buildings. *Emergency and standby power shall be provided in high-rise buildings in accordance with 780 CMR 403.10 and 780 CMR 403.11.*

2702.2.15 Underground buildings. *Emergency and standby power shall be provided in underground buildings in accordance with 780 CMR 405.9 and 780 CMR 405.10.*

2702.2.16 Group I-3 occupancies. *Emergency power shall be provided for doors in Group I-3 occupancies in accordance with 780 CMR 408.4.2.*

2702.2.17 Airport traffic control towers. *Standby power shall be provided in airport traffic control towers in accordance with 780 CMR 412.1.5.*

2702.2.18 Elevators. *Standby power for elevators shall be provided as set forth in 780 CMR 3003.1.*

2702.2.19 Smokeproof enclosures. *Standby power shall be provided for smokeproof enclosures as required by 780 CMR 909.20.*

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