

## 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)) the Seattle Electrical Code.

### SECTION 2702 EMERGENCY AND LEGALLY REQUIRED STANDBY POWER SYSTEMS

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

#### Exceptions:

1. Where located within a sprinklered parking garage of Type I or II construction, emergency power and legally required standby power systems with fixed fuel quantities meeting the limits of Section 603.3 of the International Fire Code, and their transfer switches, are not required to be in a separate room. Other occupancies located in the story where the system is located shall be separated from the system by fire barriers with a minimum 1 hour fire-resistance rating.
2. Combustion and radiator intake air are permitted to be transferred from the adjacent garage. Radiator discharge air is permitted to be transferred to the adjacent garage. Radiator ventilation intake and discharge air locations shall be separated to maintain the radiator ventilation intake air temperature below the maximum temperature allowed to meet the emergency and legally required standby power system loads.

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

[F] **2702.2 Where required.** Emergency and legally required standby power systems shall be provided where required by Sections 2702.2.1 through 2702.2.20 and other sections of this code.

[F] **2702.2.1 Group A occupancies.** Emergency power systems 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)) Emergency power systems shall be provided for smoke control

systems in accordance with Section 909.11, for stairway pressurization systems in high-rise buildings in accordance with Section 909.20, and for hoistway pressurization systems in accordance with Section 909.21.5. Legally required standby power systems shall be provided for pressurization systems in low-rise buildings in accordance with Section 909.20.6 and 909.21.5.

[F] **2702.2.3 Exit signs.** Emergency power systems shall be provided for *exit* signs in accordance with Section 1011.6.3.

[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 Elevators** ((Accessible means of egress elevators)). Emergency power systems shall be provided for elevators in accordance with Sections 403.4.9.1, 403.6.1.8, 403.6.2.8 and 3016.6. Legally required standby ((Standby)) power systems shall be provided for elevators that are part of an *accessible means of egress* in accordance with Section 1007.4.

[F] **2702.2.6 Accessible means of egress platform lifts.** Legally required standby ((Standby)) power systems 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.** Legally required standby ((Standby)) power systems shall be provided for horizontal sliding doors in accordance with Section 1008.1.4.3.

[F] **2702.2.8 Semiconductor fabrication facilities.** Emergency power systems shall be provided for semiconductor fabrication facilities in accordance with Section 415.10.10.

[F] **2702.2.9 Membrane structures.** Legally required standby ((Standby)) power systems 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 *International Fire Code*.

[F] **2702.2.10 Hazardous materials.** Emergency or legally required standby power systems shall be provided in occupancies with hazardous materials in accordance with Section 414.5.3.

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

[F] **2702.2.12 Organic peroxides.** Legally required standby ((Standby)) power systems shall be provided for

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occupancies with organic peroxides in accordance with the *International Fire Code*.

[F] **2702.2.13 Covered and open mall buildings.** ~~((Standby))~~ Emergency power systems shall be provided for voice/alarm communication systems in *covered and open mall buildings* in accordance with Section 402.7.3.

[F] **2702.2.14 High-rise buildings.** Emergency ~~((and standby))~~ power systems shall be provided in high-rise buildings in accordance with Sections 403.4.8 and 403.4.9.

[F] **2702.2.15 Underground buildings.** Emergency ~~((and standby))~~ power systems shall be provided in underground buildings in accordance with Sections 405.8 and 405.9.

[F] **2702.2.16 Group I-3 occupancies.** Emergency power systems shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

[F] **2702.2.17 Airport traffic control towers.** Legally required standby ~~((Standby))~~ power systems shall be provided in airport traffic control towers in accordance with Section 412.3.4.

~~(([F] 2702.2.18 Elevators. Standby power for elevators shall be provided as set forth in Sections 3003.1, 3007.9 and 3008.9.))~~

[F] **2702.2.19 ((Smokeproof enclosures)) Pressurization systems.** ~~((Standby))~~ Emergency power systems shall be provided for ~~((smokeproof enclosures))~~ pressurization systems as required by Section 909.20.5.7 ~~((909.20.6.2))~~.

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