

**City of SCOTTSDALE, ARIZONA**

**1999 NEC ELECTRICAL CODE AMENDMENTS**

**Ordinance No. 3413  
Effective March 8, 2002**

VOLUME II Chapter 31 BUILDINGS AND BUILDING REGULATIONS

Sec. 31-47. Amendments.

(a) The Uniform Administrative Code Provisions for the 1996 Edition of the National Electrical Code are amended in the following respects:

Article 810 is amended by adding item E to read:

**E. Public safety radio amplification system.**

810-80. Radio coverage. Except as otherwise provided, no person shall erect, construct or modify any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for city emergency service workers, including but not limited to firefighters and police officers. A certificate of occupancy may not be issued for any building or structure which fails to comply with this requirement.

The frequency range which must be supported for police communications shall be 806 MHz to 869 MHz, or as required by the City of Scottsdale Police Department. The frequency range which must be supported for fire department communications shall be 153 MHz to 155 MHz, or as required by Rural Metro Fire Department.

For purposes of this section, adequate radio coverage shall include all of the following:

- (a) A minimum signal strength of one (1) microvolt available in 85% of the area of each floor of the building when transmitted from the City of Scottsdale communications systems.
- (b) A minimum signal strength of one (1) microvolt received at the City of Scottsdale Communications Systems when transmitted from 85% of the area of each floor.
- (c) A 90% reliability factor.

The building official may require that sufficient evidence or proof be submitted to substantiate compliance with this provision of the code before a building permit is issued. The plans and specifications, and other data, filed by an applicant for permit shall be reviewed by the building official. Such plans may be reviewed by other departments of this jurisdiction to verify compliance with this provision of the code.

810-81. Enhanced amplification systems.

Buildings and structures over thirty-five (35) feet in height, buildings with below grade spaces or parking, and other buildings where required to provide adequate signal strength, shall be equipped with any of the following to achieve the required adequate radio coverage: Radiating cable system(s) or internal multiple antenna system(s) with 800 MHZ and 150 MHZ amplification system(s) as needed. If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least two (2) hours without external power input. The battery system shall automatically charge in the presence of an external power input.

810-82. Testing procedures.

(a) Initial tests: The building official may require tests as evidence of compliance to be made at no expense to this jurisdiction, to be performed by the installer in the presence an agent of the city of Scottsdale. A certificate of occupancy may not be issued for any building or structure which fails to comply with this test.

(b) Annual tests: Will be conducted by rural/metro fire department and/or the City of Scottsdale Police Department in conjunction with inspection procedures.

810-83. Uses where not required.

This section shall not apply to any single-family residence. The requirements of this section may be waived by the building official for buildings which do not have below grade spaces or parking.

(Ord. No. 2058, 6-19-89; Ord. No. 2452, 6-15-92; Ord. No. 2787, §§ 1, 2, 12-18-95; Ord. No. 3099, § 2, 2-17-98)