

Sarpy County Nebraska Zoning Ordinance

Section 37

37.14 Public safety Radio Amplification Systems:

37.14.1 GENERAL: Except as otherwise provided, no person shall own, erect, construct, remodel, renovate, or provide an addition of more than 20% to, any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for the Sarpy County Radio Communications Systems (SCRCS), including but not limited to emergency service workers, firefighters and police officers. Descriptively, adequate coverage means the ability for SCRCS users to transmit into the building an intelligible voice signal that may be heard; the ability to receive an intelligible voice signal transmitted and originating from within the building; and, the ability to transmit and receive intelligible voice signals among users who are within the building. For purposes of this section, adequate radio coverage shall include all the following; 1) A minimum received signal strength in the building of one (1) micro volts (-107 dBm) available in ninety (90) percent of the area of each floor when transmitted from the SCRCS; 2) A minimum signal strength of one (1) micro volts (-107 dBm) received by the SCRCS when transmitted from ninety (90) percent of the area of each floor of the building; 3) The frequency range that must be supported shall be 806 MHz to 869 MHz; and, 4) A ninety (90) percent reliability factor shall be required.

37.14.2 Testing Procedures:

Initial Tests; It will be the building owners responsibility to have the building tested to ensure that two-way coverage is a minimum of ninety (90) percent. At a minimum, the test shall be conducted using a Motorola MTS200, or equivalent portable radio, talking through the SCRCS. Radios maybe obtained for conduct of the tests from the Sarpy County Communications Department (SCCD). The gain values of all amplifiers shall be measured and the test measurement results shall be provided to the SCCD and kept on file so that the measurements can be verified each year during the annual tests. The SCCD shall be informed of the schedule for such testing, and, at its discretion may participate as an observer. A Certificate of Occupancy shall not be issued to any structure if the building fails to comply with this section.

Annual tests; The building owner shall be responsible to conduct annual tests. Such tests shall follow the guidance outlined in paragraph 37.14.1 (General) and 37.14.2 (Initial Tests) above.

37.14.3 Amplification Systems Allowed

Buildings and structures which cannot support the required level of radio coverage shall be equipped with any of the following in order to achieve the

required adequate radio coverage: a radiating cable system or an internal multiple antenna system with or without FCC type accepted bi-directional amplifiers as needed. If used, bi-directional amplifiers shall include filters to reduce adjacent frequency interference at least 35 dB below the NPSPAC band. The filters shall be tuned to 825 MHz and to 870 MHz so that they will be 35 dB below the NPSPAC frequencies of 824 MHz and 869 MHz respectively. Other settings may be used provided that they do not attenuate the NPSPAC frequencies and further provided that they are not more than one MHz from the NPSPAC frequencies. 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 twelve (12) hours without external power input. The battery system shall automatically charge in the presence of an external power input.

37.14.4 Field Testing:

SCCD personnel, after providing reasonable notice to the owner or his representative, shall have the right to enter onto the property to conduct field testing to be certain that the required level of radio coverage is present.

37.14.5 Exemptions: This section shall not apply to; buildings permitted in residential districts; any building constructed of wood frame; any building thirty five (35) feet high or less; as long as none of the aforementioned buildings make use of any metal construction or any underground storage or parking areas. For purposes of this section, parking structures and stairwells are included in the definition of "building" and stair shafts are included in the definition of "all parts of a building", but elevators may be excluded.