

Vigo County Fire Prevention

Ordinance # 2025-7

WHEREAS, pursuant to Indiana Code §36-8-2-3, Vigo County may establish, maintain, and operate a fire prevention system; and

WHEREAS, pursuant to Indiana Code §36-8-17-8 (b) the Vigo County Building Inspector shall conduct inspections within the jurisdiction of Vigo County for compliance with the fire safety laws; and

WHEREAS, Vigo County wishes to promote the health, safety, and well being of its citizens through enforcement of the Fire Prevention Code.

Now therefore be it ordained as follows:

Public Safety Radio Building Amplification System

- a) Except as otherwise provided, no person shall erect, construct, change the use of, renovate significantly, or provide and addition of more than twenty percent (20%) to, any multi-family, commercial, and/or industrial building or structure or any part thereof, or cause the same to be done which fails to support radio coverage for the Hoosier SAF-T Radio Communications System, including but not limited to firefighters and police officers.
- b) For purposes of this section adequate radio coverage shall include all of the following:
 - 1) A minimum signal strength that provides a DAQ 3.4 available in ninety five percent (95%) of the general use area of each floor of the building when transmitted from the closest Hoosier SAF-T Radio Communications System site:
 - 2) A minimum signal strength that provides a DAQ 3.4 available in ninety nine percent (99%) of the critical areas of each floor of the building when transmitted from the closest Hoosier SAF-T Radio Communications System site:
 - 3) The frequency range which must be supported shall be the current band of frequencies used by the Vigo County Emergency Response Agencies; and
 - 4) A one hundred percent (100%) reliability factor.
- c) When measuring the performance of a bi-directional amplifier, signal strength measurements are based on one (1) input signal adequate to obtain a maximum continuous operating output level.
- d) The minimum qualifications of the system designer and lead installation personnel shall include both of the following:
 - 1) A valid FCC issued general radio operator license.

- 2) Certification of in-building system training issued by a nationally recognized organization, school or a certificate issued by the manufacturer of the equipment being installed.
 - 3) Installers must contact Indiana's Integrated Public Safety Commission and meet any permitting requirements set forth by IPSC.
- e) Amplification systems allowed.
- 1) 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:
 - i. A radiating cable system; or
 - ii. A distributed antenna system with Federal Communications Commission (FCC) – certified signal boosters, or other system approved by the fire code official in order to achieve the required adequate radio coverage.
 - 2) 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.
 - 3) If used, bi-directional amplifiers shall include filters to reduce adjacent frequency interference. These filters shall be turned so that they will be thirty-five (35) dbm below the Vigo County frequencies.
- f) Testing procedures.
- 1) Acceptance test procedure. When an in-building radio system is required, and upon completion of installation, it will be the building owner's responsibility to have the radio system tested to ensure that two (2)-way coverage on each floor of the building is a minimum of ninety percent (95%) in general areas and (99%) in critical areas. Each floor of the building shall be divided into a grid of approximately twenty (20) equal areas. A maximum of two (2) non-adjacent areas will be allowed to fail the test. In the event that three (3) of the areas fail the test, in order to be more statistically accurate, the floor may be divided into forty (40) equal areas. A maximum of four (4) non-adjacent areas will be allowed to fail the test. After the forty (40)-area test, if the system continues to fail, it will be the building owner's responsibility to have the system altered to meet the ninety percent (95/99%) coverage requirement.
 - 2) The test shall be conducted using a Motorola APX6000, or equivalent, portable radio, talking through the Hoosier SAF-T Radio Communications System as specified by the authority having jurisdiction. A spot located approximately in the center of a grid area will be selected for the test, then the radio will be keyed to verify two (2)-way communications to and from the outside of the building through the Hoosier SAF-T Radio

Communications System. Once the spot has been selected, prospecting for a better spot within the grid will not be permitted.

- 3) The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results become lost, the building owner will be required to rerun the acceptance test to reestablish the gain values.
- 4) As part of the installation, a spectrum analyzer or other suitable test equipment shall be utilized to insure that spurious oscillations are not being generated by the subject bi-directional amplifier (BDA) due to coupling (lack of sufficient isolation) between the input and output systems. This test will be conducted at time of installation and subsequent annual inspections.
- 5) Annual tests. When an in-building radio system is required, it shall be the building owner's responsibility to have all active components of the system, such as amplifiers and power supplies and backup batteries tested to a minimum of once every twelve (12) months. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance. Backup batteries and power supplies shall be tested under load of a period of one (1) hour to verify that they will properly operate during an actual power outage. If within the one (1)-hour test period, and in the opinion of the testing technician, the battery exhibits symptoms of failure, the test shall be extended for additional one (1)-hour periods until the integrity of the battery can be determined. All other active components shall be checked to determine that they are operating within the manufactures specifications for the intended purpose.
- 6) Five year tests. In addition to the annual test, it shall be the building owner's responsibility to perform a radio coverage test a minimum of once every five (5) years to ensure that the radio system continues to meet the requirements of the original acceptance test.
- 7) Qualifications of testing personnel. Personnel conducting radio system tests shall be qualified to perform the work. All tests shall be conducted, documented and signed by a person in possession of a current FCC license, or a current technician certification issued by the Associated Public-Safety communications Officials International (APCO) or the Personal Communications Industry Association (PCIA). All test records shall be retained on the inspected premises by the building owner and a copy submitted to the Vigo County Building Inspector.
- g) Field testing. Police and Fire 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. The Vigo County Building Inspector reserves the right to approve the use of new technologies that provide sufficient radio coverage and or amplification as measured by qualified third party testing company with 100% reliability. The Vigo

County Building Inspector reserves the right to disapprove of the use technologies, which require an upgrade to equipment or subscribe to additional technologies for effective radio communication coverage.

h) Exemptions.

- 1) This section shall not apply to buildings less than five thousand (5,000) square feet.
- 2) This section shall not apply to single family residential dwellings.

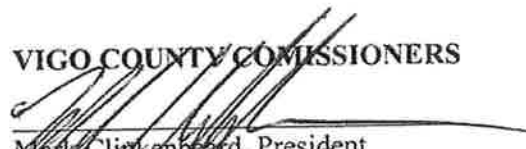
The illegality or invalidity, or any reason, of any of the sections of this ordinance, or parts thereof, shall invalidate only such section or sections as are so determined to be illegal or invalid, any such invalidity shall have no effect on the remaining sections of this ordinance.

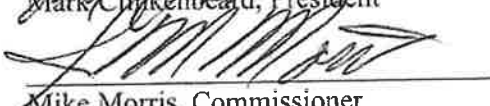
All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed, but otherwise the previous ordinance remains in full force and effect.

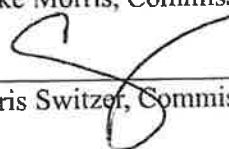
This ordinance shall be in full force and effect from and after the date of its passage by the Board of Commissioners of Vigo County and upon publication as required by law.

ADOPTED this 7th day of October, 2025.


VIGO COUNTY COMMISSIONERS


Mark Clinkenbeard, President


Mike Morris, Commissioner


Chris Switzer, Commissioner

ATTEST:


Larry T. Hutchings II, Vigo County Auditor