

CITY OF TOLEDO OHIO

FIRE AND RESCUE DEPARTMENT

**Fire Alarm System Rough Inspection TMC 1512.08 (3)**

The installing contractor must have a valid City of Toledo business license & a construction permit. Approved plans shall be on site. Fire inspections cannot be conducted until the license and a permit are obtained. **TMC 1512.02**

Per the approved plans... Consider the following: (Code references are in red)

- Proper wiring type shall be used. This should be called out on your approved plans. **NEC 760.135, Table 760.154 and Table 760.154 (A)**
 - Proper separation of wiring. Generally speaking, fire alarm cables may not be run in the same raceway as other conductors or wiring. **NEC 760.3 (G) & 760.136** Using the same raceway is permitted under some conditions. **NEC 760.3 (L) & 760.3 (M)**
 - Fire alarm wiring run in underground conduits must be listed for wet locations. **NEC 760.3 (D) & 760.176**
 - Proper wiring shall be used. This should be stated on the approved plans. **NEC 760.135 thru 760.143**
 - Fire alarm wiring shall not be damaged during installation. **NEC 760.24**
 - Proper support of all conduit is required. This is generally within 3' of device boxes and every 10' horizontally **NEC 760.24**
 - Support all device boxes properly. **NEC 300.11 (A) & NEC 312.23**
 - Support of all open conductors at intervals that will prevent damage to the conductors is required. **NEC 760.24 (A) & (B), 760.130(B)**
 - Vertical support of fire rated cables shall be installed in accordance with the code. **NEC 300.17**
 - Conductors shall not be attached to conduits, piping or raceway. **NEC 300.11 & NEC 760.143**
 - Conductors shall not be supported by a drop ceiling or its' support wires. **NEC 300.11 (B)**
 - Conduit nipples are to be installed thru penetrations in walls or floors. **NEC 760.53 (A) (1) (2)**
 - There should be a protective bushing installed on these nipples. **760.3 (K) & NEC 300.15 (C)**
 - In fire rated assemblies, penetrations are to be sealed with approved products **NEC 760.3 (A) & 300.21**
 - Location all fire alarm system devices should be to the approved drawings:
 - Devices boxes shall be mounted, and splices made in a box **NEC 760.130 (B) (1)**
 - Pull stations- within 5' of ground level exit doors. **OBC 907.4.2.1**
 - Travel distance between pull stations may not exceed 200'. **OBC 907.4.2.1**
 - Mounting height of pull stations shall be 42" -48" above finished floor to the activating handle. **OBC 907.4.2.2**
 - Visual devices- mount so lens is between 80" and 96" above finished floor **NFPA 72 18.5.5.1**
 - Audible device- if ceiling height allows not less than 90" AFF, not less than 6" below ceiling **NFPA 72 18.4.8.1**
 - Smoke detectors (spot type) - do not locate within 3' of air supplies **NFPA 72 17.7.4**
 - Smokes (above FACP)- ceiling ht 15' or less-mount on ceiling, ceiling ht greater than 15'- mount on the wall above panel within 6' of top of panel **OBC 907.4.1 NFPA 72 Commentary**
 - The location of fire alarm control panel is as shown on plans.
If not in the approved location...why? Makes sense- record new location on the plans.
Doesn't make sense- violation **OBC 108.6.1**
- Note: Panels in stairways and in un-accessible areas are generally not acceptable. OBC 1024.6**
- The breaker that powers the fire alarm panel shall supply no other equipment. The breaker shall have red identification and shall be marked in the power panel "Fire Alarm Circuit". The location and circuit number of the power to the fire alarm panel shall be marked on the inside door of the fire alarm panel. **NEC760.121 (B)**
 - The location of the remote annunciator panel(s) is as shown on the plan. Should be at location of first response. **NFPA 72 10.17.3**
 - Unused or abandoned fire alarm wiring, cables or devices shall be removed. If not removed for the rough inspection, it must be removed before final approval of the system. **NEC 760.25**