## University of Toledo Main Campus Fire Alarm and Mass Notification Requirements

July 28, 2009

The following minimum fire alarm and mass notification requirements shall be implemented for all new construction and renovation projects on Main Campus buildings:

- The preferred fire alarm manufacturer for Main Campus shall be SimplexGrinnell (419-861-0661). Contact Chad Robbins (ext. 225) for specifications and part numbers. U.T. representative is Floyd Shoup.
- There is an existing fire alarm network on campus covering approximately 26 buildings with a Network Display Unit (NDU) in campus police. An alternative location (to be determined) shall serve as the remote command center.
- All old devices & wiring shall be removed completely after new devices and wiring has been installed. There will be nothing abandoned in place.
- Any new panels added will be fire alarm panel 4100u Voice panel which will be networked via multi-mode fiber. Copper or phone lines may be considered in special instances only after approval of the UT representative. The 4100u is an addressable panel, but can incorporate zone cards for retrofit applications and panel replacements. Minimum amplifier per panel shall be 100w and shall contain backup amplification. CPU display shall be Infoalert display unit with programmable buttons for multiple alert messages.
- All wiring is to meet code requirements and cannot be installed with other cables.
  They must be separate conduits or bridal rings. Cable tray can only be used when separated by a factory divider.
- Penetrations will be fire stopped using HILTI Solutions
- Fire alarm/Mass notification speakers shall be ceiling mounted (lay-in ceilings) or surface wall mounted in exposed areas. Speakers can be 25V or 70V.

- Fire alarm/Mass notification strobes shall be Dual Emergency Notification Devices. Combination units shall be fully addressable to allow for operation via programming on a single pair of wires. Amber lens strobe shall be used for Emergency Communication and the clear lens shall be used in fire alarm evacuation. The amber strobe shall take precedence in an emergency per NFPA 72. In existing buildings where speaker/strobes are already present, amber alert strobes shall be located throughout the facility.
- Mass notification strobes shall have amber lens and shall be synchronized.
  Strobes shall not be located in elevators or exit stairways.
- Fire alarm/mass notification "Network" wiring shall be in conduit. Open cabling will not be permitted on a network. All Network Wiring shall be Class A only.
- LABELING All Initiating devices are to be labeled with address ID point.
- Surge protection shall be provided at each panel.
- In buildings that have emergency generator power, the fire alarm panel shall be connected to emergency power.
- Discuss options for non voice panel or obsolete panel.
- Discuss options for existing paging system or existing mass notification systems interconnection options.
- As-built drawings will reflect all new network/system architecture changes, labeling, and addresses.