27 32 27 Connectivity for Fire Alarm Dialers
(Revision date: 2/15/12)

1.0 Purpose

A. These guidelines provide requirements for designers to incorporate into bid documents. They are part of the University Wiring Standard (UWS), version 3.0.

2.0 General Requirements

A. Fire alarm dialers. Fire alarm systems in campus buildings are distinct from the voice/data/video infrastructure. The connection of these systems to the campus centralized monitoring station is via dialers that utilize AT&T Centrex dial tone.

3.0 Materials and Standards

A. Materials. The materials used for this system are not manufacturer and part number specific.

B. Standards. All work shall be in accordance with the latest edition of all applicable campus, State, and Federal regulations and codes.

C. Support. ComTech is responsible for the provision of telephone service (dial tone) to the demarcation point at the fire alarm dialer. Support of the dialer equipment is the responsibility of NCSU Facilities Operations.

D. System isolation. The fire alarm system in a building is distinct and separate from the communications infrastructure. Cabling between fire alarm system components should not be installed in the wireway/conduit system used for communications cabling. Communication pathway systems support structures should not be used to mount fire alarm devices and conduits. No fire alarm system components (including the dialer) should be located in BDF/IDFs.

E. Telecommunication requirements. A small junction box (4" x 4" x 2 ½" min.) should be installed adjacent the fire alarm dialer to serve as a demarcation point for the telephone connection. A 1” conduit should be installed between the junction box and the fire alarm dialer cabinet. A second 1” conduit should be installed from the junction box to the BDF (or nearest telecommunications wireway). The contractor should install two four pair, Category 3 UTP cables from the BDF to the junction box. These cables should be installed unterminated with 5 feet of cable coiled up at the junction box and 50 feet of cable coiled and neatly attached to the wall of the BDF. These cables should be tagged on both ends clearly as “fire alarm # 1” and “fire alarm #2”).

F. Service. ComTech will order two dial tones (primary and secondary lines) from AT&T for the fire alarm dialers. ComTech will also terminate both ends of the cables described above. The station end will be terminated with two RJ31X jacks installed inside the junction box adjacent to the dialer. At the BDF end the cables will be terminated on the special use lines 66 block. The contractor should notify ComTech (via the NCSU Facilities construction manager) at least 30 days prior to needing the dial tones installed for certification inspections to coordinate service connection.

End of Section