

DIVISION 28 – ELECTRONIC SAFETY & SECURITY

Section Number	Title
<b>28 00 00</b>	<b>ELECTRONIC SAFETY AND SECURITY</b>
<b>28 30 00</b>	<b>ELECTRONIC DETECTION AND ALARM</b>
<b>28 31 00</b>	<b>Fire Detection and Alarm</b>
28 31 11	Digital, Addressable Fire Alarm Systems

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**28 31 11 DIGITAL, ADDRESSABLE FIRE ALARM SYSTEM**

Part 1 – General

New installations or renovations of fire alarm systems shall be reviewed and approved by NAU Fire and Life Safety (FLS) prior to start of construction. All new installations or renovations of fire alarm systems shall comply with latest Codes adopted by Northern Arizona University.

All fire alarm system wiring shall be installed in ½” minimum conduit. Any exceptions to this requirement shall be specifically granted by FLS. Refer to Section 26 05 33, Raceway and Boxes for Electrical Systems, for conduit and box identification requirements.

All new fire alarm systems shall be addressable. Existing hardwired devices and fire alarm panels or sub-panels shall not be carried over into the new system; each project shall install a new, complete, addressable fire alarm system.

All new fire alarm systems shall as a minimum include detection in corridors, hallways, mechanical rooms, electrical rooms, and telecommunications rooms. FLS may additionally require detection in other areas.

All buildings shall have manual pull stations at exterior exits from mechanical, electrical, and service room exits. All buildings shall be equipped with an annunciator panel at the entrance used by first responders; A/E shall coordinate the location of this entrance with FLS during design.

All dormitories or residential areas shall be equipped with “total detection” systems, and shall have addressable smoke detectors with sounder bases and visual notification appliances in all sleeping rooms. The sleeping area smoke detector shall annunciate a supervisory alarm at the building fire alarm panel. Provide a manual pull station at the main entrance ‘Resident Assistant’ desk.

All academic buildings shall be equipped with manual pull stations per NFPA 72.

Installing contractor shall have support staff with 4-hour emergency response time, spare parts inventory, and all necessary test and diagnostic equipment.

Part 2 – Products

Approved fire alarm panels are Notifier NSF2-3030, NFS2-640, and NSF2-320.

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All software shall be non-proprietary.

Fire alarm system shall communicate point-by-point via Universal Digital Alarm Communicator Transmitter (UDACT) with NAU's central station receiver, using the Ademco Contact ID format.

All beam and duct detectors shall be equipped with remote test/indication devices.

Part 3 – Execution

Installing contractor shall be a Notifier factory-certified installer. Installing personnel shall be supervised by persons who are qualified and experienced in the installation, inspection, and testing of fire alarm systems. Qualified persons shall include, but are not limited to, factory-trained and certified persons, persons with NICET Level II certification, or persons licensed or certified by the Authority Having Jurisdiction.

Fire alarm systems shall be completely field-programmable by NAU FLS personnel. The contractor shall provide FLS with all software, access and login codes, and any peripheral devices necessary to program the system or devices.

The contractor shall provide FLS with minimum four (4) hours training, to include all aspects of system functions, operation, programming, and troubleshooting and repair procedures.

FLS will program the NAU central station receiver to receive and display signals from new or altered building fire alarm systems. FLS will provide primary, secondary, and account numbers. The contractor shall provide building telephone system connections to complete the UDACT communications path to the existing NAU telephone system.

Fire alarm panels and annunciators shall be mounted at a height of 60" above finished floor to the centerline of the display. External battery boxes shall be mounted directly underneath the panel that they power. Auxiliary cabinets shall be mounted at a height of 60" above finished floor to the centerline of the enclosure.

Fire alarm initiating and notification devices shall be mounted according to ADA requirements.

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At closeout, the Contractor shall provide all system manuals, accurate plans showing all system components and devices and their device identification and addresses, and two copies of system programming disks.

Provide a 3-year warranty on components, programming, and installation.

**\*\*END OF SECTION\*\***