UNCG Fire Alarm Programming Guidelines
Revised February 2015

These guidelines are intended to provide specific programming requirements to the fire alarm system installer so that the fire alarm building panel and the panel at the central monitoring station at the UNCG Campus Police Building communicate appropriately. Additionally, these guidelines are intended to ensure that testing and confirmation of accurate communication between the fire alarm building panel and the central monitoring station at the UNCG Campus Police Building is confirmed by the designer prior to occupancy.

Design phase:

On traditional style residence hall projects:

- Activation of one smoke detector within the sleeping room shall activate a sounder base within the same sleeping room and shall send a "pre signal notification" to the monitoring station. This does NOT create a general building alarm. The “pre-signal notification” shall be received at the UNCG Campus Police Building monitoring station as a “Fire status” producing a “yellow” light alert. The building audible, flashing lights, and evacuation should be reserved for "General Alarms" only.
- Activation of a second smoke detector in the building shall be received at the UNCG Campus Police Building monitoring station as a “General alarm”, producing a “red” light alert.
- Activation of any pull station, common area smoke detector, heat detector or water flow switch in the building shall be received at the UNCG Campus Police Building monitoring station as a “General alarm”, producing a “red” light alert.

On apartment and suite style residence hall projects:

- Activation of one smoke detector within the suite/apartment unit shall activate sounder bases and strobes in all areas of the suite/apartment and shall send a "pre signal notification" to the monitoring station. This does NOT create a general building alarm. The “pre-signal notification” shall be received at the UNCG Campus Police Building monitoring station as a “Fire status” producing a “yellow” light alert. The building audible, flashing lights, and evacuation should be reserved for "General Alarms" only.
- Activation of a SECOND smoke detector within the BUILDING (including within the same suite or apartment unit) shall be received at the UNCG Campus Police Building monitoring station as a “General alarm”, producing a “red” light alert. Activation of any pull station, common area smoke detector, heat detector or water flow switch in the building shall be received at the UNCG Campus Police Building monitoring station as a “General alarm”, producing a “red” light alert.

All other buildings:

- Activation of a single smoke detector in the building shall be received at the UNCG Campus Police Building monitoring station as a “general alarm” producing a “red” light alert.
Construction phase:

- A fire alarm system pre installation conference is required prior to the fire alarm installer starting work. Programming requirements, quality concerns and schedule shall be reviewed at this conference.
- The fire alarm installer shall provide to UNCG a copy of the CMS after all devices are programmed, after the contractor has completed 100% test, and NO less than five days prior to the engineer’s final inspection and certification of NFPA 72.
- UNCG requires a minimum of five days to allow UNCG personnel to program the required contact ID information at the central monitoring station at the UNCG Campus Police Building.
- During the engineer’s final inspection, UNCG will have Facilities personnel at the central monitoring station confirming that the events at the site accurately reflect the identification number of the device, the location of the device and that type of communication (fire status, general alarm, and trouble) are reported accurately at each test.

**Definitions:**
(The following definitions are from NFPA 72 2007 edition)

**Signal** – A status indication communicated by electrical or other means.

**Alarm Signal** – A signal indicating an emergency condition or an alert that requires action.

**Fire Alarm Signal** - A signal initiated by a fire alarm-initiating device such as a manual fire alarm box, automatic fire detector, workflow switch, or other device in which activation is indicative of the presence of a fire or fire signature.

**Supervisory Signal** - A signal indicating the need for action in connection with the supervision of guard tours, the fire suppression systems or equipment, or the maintenance features of related systems.

**Trouble Signal** - A signal initiated by a system or device indicative of a fault in a monitored circuit, system, or component.

**UNCG Specific Status Outputs:**

Fire Status - This type of alarm is used in the Alarmcenter software at the UNC-G dispatch center. Once an alarm has been received from a panel on campus, the signal is translated into an alert that would need to have a dispatcher interact with the software. Historically, the general use at UNC-G of “Fire Status” type alarms are supervisory signals and single detector room activation in dealing with Housing and Residence Life buildings.
The following definitions are from NFPA 72 2007 edition:

3.3.172 Signal. A status indication communicated by electrical or other means. (SIG-FUN)

3.3.172.1 Alarm Signal. A signal indicating an emergency condition or an alert that requires action. (SIG-FUN)

3.3.172.4 Fire Alarm Signal. A signal initiated by a fire alarm-initiating device such as a manual fire alarm box, automatic fire detector, workflow switch, or other device in which activation is indicative of the presence of a fire or fire signature. (SIG-FUN)

3.3.172.6 Supervisory Signal. A signal indicating the need for action in connection with the supervision of guard tours, the fire suppression systems or equipment, or the maintenance features of related systems. (SIG-FUN)

3.3.172.7 Trouble Signal. A signal initiated by a system or device indicative of a fault in a monitored circuit, system, or component. (SIG-FUN)

Fire Status:

This type of alarm is used in the Alarmcenter software at the UNC-G dispatch center. Once an alarm has been received from a panel on campus, the signal is translated into an alert that would need to have a dispatcher interact with the software. Historically, the general use at UNC-G of “Fire Status” type alarms are supervisory signals and single detector room activation in dealing with Housing and Residence Life buildings.

Contact ID reporting takes the following format:

CCCC Q EEE GG ZZZ

CCCC = customer (subscriber account number)
Q = event qualifier, E = new event, R = restore
EEE = event code
GG = partition number, 00-08 (always 00 for non-partitioned panels)
ZZZ = zone ID number reporting the alarm (001-099), or user number for open/close reports.

* System status messages (i.e. AC Loss, Low Battery) contain zeros in the ZZZ location.
Examples of raw data received into Alarmcenter:

1a012 0058131602000003/03/1220:16:30 - Bryan Building
1a016 000913120000356 09/05/1413:46:24 - Lee Residence Hall

Common event codes we interact with on Campus:

**Fire Alarm event codes:**

110 FIRE
200 FIRE SUPERVISORY
300 System Trouble
301 AC LOSS
302 LOW SYSTEM BATTERY
350 Communication Trouble
351 TELCO 1 FAULT
352 TELCO 2 FAULT

**Panic Alarm event codes:**

120 Panic Alarm
121 DURESS
122 SILENT

**Burglary alarm panel event codes:**

130 Burglary
131 PERIMETER
132 INTERIOR
134 ENTRY/EXIT

**TEST / MISC:**

602 PERIODIC TEST Test-Periodic (Restore Not Applicable)