

**SECTION 28 31 90 EMERGENCY COMMUNICATION SYSTEM (ECS) PANEL
DESIGN AND CONSTRUCTION STANDARD**

EMERGENCY COMMUNICATION SYSTEM (ECS) PANEL

1. Provide in-building Emergency Communication System (ECS) panel adjacent to or near fire alarm control panel (specify location of fire alarm panel in the building under design).

Coordinate mounting location with architect and owner. Panel to be surface mounted at an accessible height.

2. ECS panel to be Federal Signal product containing the following: UVIC-IP Controller, UV Audio & Relay (ARM), and Digital Voice Mini SD card. Insure UV arm relays are continuously engaged during live and pre-recorded messages, which will make sure that the UVIC-IP controllers maintain priority over the fire alarm panels when activated.

Provide battery backup capacity as recommended by Federal Signal for a 7 day power supply.

3. Provide pre-recorded system test message. The pre-recorded message is to contain a 10 second delay prior to voice to accommodate fire alarm control panel processing time. The delay time may contain tone signals.

4. Provide Ethernet connection coordinated with UT-ITS project manager and separate circuit 120V AC power for ECS panel. Coordinate with Federal Signal to configure TCP/IP network as required to permit ECS communications.

5. Fire Alarm specification to include: Program fire alarm system to accept line level audio and contact closure (push-to-talk signal or "PTT") from ECS panel. Prioritize ECS signal above fire alarm signals, above the building manager microphone, and below the on-board fire alarm fire control panel microphone.

6. Activation of the ECS panel shall activate building strobes.

7. Retain Federal Signal to install ECS panel and connect/configure ECS panel and head-end at dispatch as required to bring building into the in-building communication network.

8. Ensure building fire alarm system and Ethernet connection are operational prior to ECS panel connection.

9. Connect 600 ohm balanced line level audio output and dry contact relay from ECS panel to the existing auxiliary audio input board on the fire alarm control panel. All wiring shall be in conduit and audio wiring is to be shielded twisted pair. Ethernet conduit is only required at wall penetrations and below eight feet AFF. The junction boxes and connection at FACP is to be labeled, "ECS".

10. Coordinate ECS testing with UT FSSS after installation and contractor testing is completed. Report completed and tested system installation to UT Campus Safety and Security office.

**SECTION 28 31 90 EMERGENCY COMMUNICATION SYSTEM (ECS) PANEL
DESIGN AND CONSTRUCTION STANDARD**

12. Verify the requested equipment will perform the required functions with Federal Signal and Fire alarm panel manufacturer prior to proceeding. Submit RFI for issues and/or deviations.

SUPPLEMENTAL EMERGENCY MICROPHONE

1. Surface mount supplemental microphone in a public area near the fire alarm panel. If walls are fire resistance rated construction, maintain rating with installation.

2. Connect supplemental microphone to fire alarm control panel. All wiring shall be in conduit. Junction boxes and connection at FACP are to be labeled "Building Manager Microphone" with permanent labels.

3. Supplemental microphone enclosure panel height shall be 48 inches AFF to the top. Enclosure shall not protrude more than 4 inches into egress space.

4. Interface with FACP as required to connect the supplemental microphone. Installed microphone is to function as supplemental device only.

5. Activation of supplemental microphone shall not activate strobes as directed by the University.

6. Supplemental microphone shall be prioritized beneath fire alarm signals as directed by the University. Pre-recorded fire alarm messages and on-board fire alarm microphone shall override supplemental microphone if activated.

7. Coordinate construction times with University of Texas.

8. Coordinate enclosure mounting location and method with architect and owner.

9. Ensure feedback is not created by microphone use. Adjust adjacent speaker output if necessary - adjacent speaker can be removed if required.

10. Provide Hoffman model ATC10104S 10"x10"x4" (or sized as required to contain microphone) surface-mounted enclosure (or recessed at locations identified) to contain supplemental microphone locked with key part #87573327. Verify remote microphone fits within enclosure. For examples, reference supplemental microphone enclosure at UT MAI.

11. Provide fire alarm manufacturer's Remote Microphone within enclosure. Provide additional equipment as required to connect to fire alarm control panel.

12. Provide 1" x 3" adhesive-backed phenolic labels with white letters on a black background reading, "Building Manager", on the supplemental microphone enclosure.

13. Verify requested microphone and enclosure will perform the required functions prior to proceeding. Submit RFI for issues and/or deviations.