

S4 275118

S4- Emergency Communications and Evacuation Paging System (ECES)

AMBIENT NOISE IN TENANT SPACES SPECIFICATIONS (60/60 Rule)

Ambient noise **SHALL NOT** exceed 60 decibels (db) in any tenant spaces, measured from the center of the space at a height of 60 inches. Tenant space is defined as the footprint of space the tenant is leasing. A shunted circuit is necessary if any device installed in the tenant space generate any ambient noise (Example TVs, Jukebox and Stereo).

The MAA Fire Marshal or designee shall perform random ambient noise measurements, if the background noise levels exceed the 60/60 Rule, at the expense of the tenant; the tenant shall be required to immediately eliminate the source of the violation or use shunting to completely disable all sound producing devices (example TV picture and sound, remove power from device) via a shunt trip breaker in the event of an Emergency Page. The use of an MAA approved shunt shall be at the sole discretion of the Fire Marshal.

References:

NFPA 101 Life Safety Code

NFPA 72 Chapters 6.9.10.4.1, 4.2 and 4.3 for survivability

General Contractor Notes (This shall be done prior to permit submittal)

Tenant/contractor shall contact and contract with Washington Professional Systems for required services.

Tenant/Contractor to provide conduit one (1) inch minimum, labeled both ends, bushed ends, to Paging Access Point (PAP) approved by the Office of Technology (OT) Engineer. A pull string must remain in conduit after installation. MAA or IED do not provide speakers, conduit or wiring. Tenants/Contractor are responsible for coordination with MAA and Washington Professional Systems.

NOTE: OT highly recommends that a 2-inch conduit, with innerduct and pull string, be installed from tenant space to the MAA PAP to allow for future installation of cable TV and High-Speed internet services, etc. With Approval of the OT Engineer the tenant may run telephone, data, speaker cables and CATV services in the same conduit

Contractor shall verify the Emergency Communications and Evacuation Paging System (ECES) at these locations with **Michael Chagnon** (443-829-9282). If capacity is available, the tenant's wiring responsibility ends at the PAP.

If capacity is not available the Tenant is to install additional wiring per OT Standards and Specifications using existing conduit and raceways, from designated PAP to paging room if available space exists in conduits.

MAA/OT may have new installations installed directly into paging rooms to bypass PAP's that are at or near design capacity.

The paging speakers (either Emergency or Tenant Paging) are for the exclusive use of the MAA. No other input devices shall be connected to these speakers. Example tenant music. Emergency Paging speakers shall be completely independent from Tenant owned speakers.

Demolition

If there is an existing Emergency Paging speakers or wiring installed and work will involve demolition or moving the speakers. The contractor shall contact the MAA, **Michael Chagnon** (443-829-9282) **10 business days prior to commencing work**. The contractor is NOT allowed to move or disable live paging equipment.

All existing spaces undergoing renovation shall comply with the ECES requirements

Washington Professional Systems Responsibilities

WPS is to coordinate installation and acceptance testing with MAA Fire Prevention Office (410-859-7815 or 410-859-7511).

WPS is to contact MAA OT for assignment of Emergency paging zone.

WPS Contact

Dave Leister
General Manager, Engineered Systems Group
Cell 301-370-4746
Office 301-942-6800

Washington Professional Systems and the contractor are to coordinate with MAA Division of Telecommunications 72 hours prior to any work being performed for coordination of installation and acceptance testing.

New or Renovated Spaces

All new or renovated spaces, or spaces and applications deemed by the Fire Marshal as having the requirement for ECES. The tenant shall install the speakers and other equipment, or conduits as defined in this document.

NOTE: Certified Integrator shall be used for all final work. WPS is the service provider for MAA's paging system. ECES shall be 100% compatible with existing system

All wiring shall be installed in conduit from the tenant space to the closest Paging Access Point (PAP).

Speaker wiring shall NOT be considered data wiring. Speaker and shunt cabling shall be installed IAW with NEC for low voltage cabling.

1. **Speaker wiring requirement:** The wire needs to be 16 gauge Stranded Twisted Pair West Penn 25225B or functional equivalent approved by MAA Office of Technology, Manager of Telecommunications. This wire is to be installed in the conduit as noted on plans
2. **Ambient noise shunt requirement:** The wire needs to be 16 gauge Twisted Pair West Penn 25225B or functional equivalent approved by MAA Office of Technology, Manager of Telecommunications. This wire is to be installed in the conduit as noted on plans. Use of the E-Page conduit is permitted
3. **Shunting Specifications (sometimes referred to as Shunt Tripping or switching)**

The shunting electrical circuit breaker shall meet the manufacturer of the service panels' specifications. All sound producing devices shall be terminated in approved shunting circuit breaker(s). Only Shunt Trip breakers shall be allowed.

The shunting circuit breaker shall operate Normally Closed (NC); power shall be normally open (NO) no power. When 24VDC is restored the circuit breaker **SHALL NOT** automatically restore to NC State. The tenant does not have the option of installing an automatically restored shunting circuit breaker.

4. **Speaker Requirement:**

The speakers shall be flush mounted if able, otherwise surface mounted. Minimum speaker requirement is as follows:

- a. **(All Tenants)** At least one speaker must be in "back of house" area. (Ex. Manager's area, Closed non-public offices)

- b. **(All Tenants)** One speaker over a continuously manned cash register or point of sale.
- c. **(Restaurant or Lounge)** At least one speaker in restaurant bar area.
- d. **(Restaurant or Lounge)** At least one speaker in customer seating area, **or** one speaker per 256 square feet (16 foot on center) Any area with person capacity over 100 will require WPS input for solution.

Tenant to provide Washington Professional Systems a copy of the reflected ceiling plan. WPS will provide technical assistance with the proper placement of speakers and associated wiring. Final determination will be made by the Fire Marshal and OT.

Background Audio Shunt

(Required if ambient noise exceeds Ambient Noise Specifications)

If an independent tenant paging, background music system, TV or the presence of ambient noise is installed an audio shunt (shunt Circuit Breaker), to the MAA Paging system shall be tenant provided and installed. Further the shunt circuit shall be extended to the closest MAA approved Paging Access Point (PAP) for connection to the system by Washington Professional Systems.

MAA will provide all equipment necessary to make the shunt operational in the PAP. The tenant is responsible for all wiring from the tenant space to the PAP and the actual device(s) required shunting their equipment, also labeled as to which Tenant it goes to.

Speaker Specifications all speakers shall be tapped at 4 Watts

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| S1 | Soundolier | FAP-62T (6 inch) | Ceiling Speaker systems w/transformer |
| | Soundolier | FAP-62TR | Speaker suspension kit |
| S2 | Soundolier | FAP-42T (4 inch) | Ceiling Speaker systems w/transformer |
| S3 | Soundolier | SM52T-W | Surface Mount Speaker systems w/transformer |
4. Tenant to provide Washington Professional Systems a copy of the reflected ceiling plan. WPS will provide technical assistance with the proper placement of the speakers and associated wiring.
 5. Tenant shall provide associated electronic support devices (speakers, wiring and shunt circuit breaker) to make the ECES operational in their space.

Conduits for system shall be marked in accordance with the **Office of Technology (OT) facilities Warning Label Marking Standard**. Check with the OT to see if there is attic stock available. Attic stock (if available) is for small jobs, not to exceed 10 labels. If attic stock is not available contractor shall furnish this item.