

KNOW THE CODE: HANGING SPEAKERS

All Lencore Sales Representatives and Installers should be aware of the following code as it relates to speakers installed in plenum and especially those installed in acoustical ceiling tile:

NFPA 70: National Electric Code (NEC)

Whether you are designing, quoting, or installing a sound masking, audio, paging or mass notification system you must be aware of the requirements detailed by the NEC.

NFPA 70 NEC 2011 Edition states:

- Generally, the rule for supporting electrical equipment is that the equipment must be 'securely fastened in place.' This phrase means not only that vertical support for the weight of the equipment must be provided but also that the equipment must be secured to prevent horizontal movement or sway.
- Sections 300.11(A)(1) and (A)(2) are quite similar...these sections clearly prohibit all types of wiring from being attached in any way to the support wires of a ceiling assembly. Unless ceiling grids are part of the building structure, they, too, are prohibited from furnishing support for cables and raceways.
- The general requirement of 334.30 is that the cable be secured. Simply draping the cable over air ducts, rafters, timbers, joists, pipes and ceiling grid members is not permitted.

Also note that acoustical ceiling tile (ACT) manufacturers', such as USG and Armstrong, state in their warranties that the product is not to be "used to support any other material except fiberglass thermal / sound control insulation..." otherwise it **voids** the product warranty.

The only known exception to the requirements as stated above is the use of a tile bridge to support the speaker only; wiring must continue to be secured in place according to code. Tile bridges attach to the suspension system and then attach to the speaker housing.

This code was designed with safety in mind for building occupants and first responders. Lencore's recommendation for speakers installed in plenum or in acoustical ceiling tile is to secure them directly to the deck with a chain or gauge hanger wire.

Therefore:

- All speakers are to be supported to the deck or installed with a ceiling tile bridge.
- All wire must be supported and never lay on the acoustical ceiling tile or suspension system.

For additional information please visit www.lencore.com or contact Lencore Technical Support at: (516) 682-9292.