The Codeword is used to clarify provisions of the Harris County Fire Code. The sole intent is to make clear acceptable practice.

**Issue Date:** November 30, 2009

**Subject:** Fire Alarm Surge Protectors

**Question:** When is surge protection required for Fire Alarm and subordinate panels?

**Answer:** Surge protection is required by the NFPA 2002, and NEC 2008, and shall include, but is not limited to, the following:

- Signaling Line Circuit (SLC)
- Notification appliance circuits
- Telephone lines
- A/C power connections

NFPA 72, 2002ed. 4.4.4.3 Transient Protection: To reduce the possibility of damage by induced transients, circuits and equipment shall be properly protected in accordance with the requirements of NFPA 70 and National Electrical Code, Article 800.

Article 760.32 of the National Electrical Code requires "fire alarm circuits that extend beyond one building shall either meet the requirements of Article 800 and be classified as communications circuits or shall meet the requirements of Article 225 & 300."

Article 800.90 requires a “listed” primary protector to be provided on each circuit - aerial or underground upon entering the building to protect the control panel and associated fire alarm devices located in the building from surges caused by lightning strikes.

Harris County requires that fire alarm circuits extending beyond the boundaries of a building to connect another building or exiting and re-entering in another location within the same facility shall be viewed as communication circuits pursuant to Article 70:760.32 and those circuits will be required to have surge protection devices listed in accordance with UL 497 A & B, installed to provide lightning protection, pursuant to Article 70:800.

Signed: [signature]

Building Official

Harris County, Texas

Signed: [signature]

Fire Marshal

Harris County, Texas