Subject: Elevator Phones – Acceptability of Communication Technologies (POTS, VoIP, Cellular / Wireless, other)

Distribution: Posted on TSSA website

This advisory is intended to provide guidance regarding acceptability of telephone technologies as related to the requirements of the CSA B44 - Safety Code for Elevators.

Phones in elevators are required to comply with requirement 2.27.1.1 Emergency Communications of the CSA B44 - Safety Code for Elevators.

The B44 requirements for emergency communications are performance based, and do not mandate nor exclude any one telephone technology over another. Technologies such as:

- POTS (plain old telephone service)
- VoIP (voice over internet protocol)
- Cellular or Wireless

are acceptable, PROVIDED these communication means are configured in a manner to satisfy the following communication* requirements (B44-2010):

- Calls must be directed to a staffed location where authorized personnel can take appropriate action
- Call must be re-directed to an alternate location if not acknowledged in 45 seconds
  - Transfer to an automated answering system is prohibited
- A visual signal must activate in the elevator when two-way communication is established
  - The visual signal shall extinguish when the communication link is terminated
  - Only authorized personnel may terminate the call (not occupants of the elevator)
- The two-way communication system must provide building information and elevator number (on demand) to authorized personnel
- Communication means in the elevator shall not use a handset
- In car communication means must be backed up by an alternate power source (in the event of normal building power failure)
  - The alternate power source must be capable of providing 4 hours of two-way communication
- A means must be provided to verify the operability of the communication means
  - End to end verification. A check from elevator phone to the authorized location answering the call
  - Verification shall occur at least once daily
  - If the verification test determines communication means are not functional an audible and visual “Elevator Communications Failure” signal shall be initiated

*other requirements for labeling, instructions, dBA levels apply. Refer to B44 2.27.1.1 for full details.

Note: An elevator phone that was once connected to a POTS system and capable of meeting the above requirements, may not be capable of meeting these requirements if switched to a VoIP service. The existing elevator telephone may only be capable of confirming a connection to a modem and not capable of determining a functioning internet connection is present beyond the modem.

It is recommended you consult with an elevator contractor and an experienced communication specialist when selecting and or changing telephone communication systems.

For alterations involving changes to emergency communications refer to B44 alteration requirement 8.7.2.28.