

SECTION 27 30 00 – TWO-WAY COMMUNICATION SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Provide a two-way communication system as required in the IBC and NFPA. Two-way communication shall be provided between each elevator lobby call box and the fire command center or master/base station location. If the master/base station is not in a constantly attended location the system will be required to be monitored off-site.
- B. The master/base station must be capable of handling a minimum of 10 call boxes.
- C. The system will need to be analog based if cable lengths will exceed 300 feet.

1.2 QUALITY ASSURANCE

- A. Each and every item of the assisted listening system shall be products of one manufacturer or products approved or certified by the manufacturer to provide a working system.
- B. Products shall be UL listed.
- C. System shall meet the requirements of Section 1007.8 and 1007.8.1

1.3 SUBMITTAL AND RECORD DOCUMENTATION

- A. Submit product data describing all equipment.
- B. Submit shop drawings including complete wiring and schematic diagrams for equipment furnished, equipment layout, and other details.
- C. Provide operation and maintenance information.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Rath, Talkaphone, Cornell or approved equal.

2.2 EQUIPMENT

- A. Master/Base Station
 - 1. 120v or 24v power acceptable
 - 2. System to provide 4-hour of talk time via battery back-up
 - 3. System shall be programmable with up to 5 "dial out" phone numbers
 - 4. Finish shall be stainless steel or steel powder coated white

5. Recessed box with flush mount
6. Capable of communication with (10) call boxes
7. Analog system because of cable length restrictions
8. System can be VOIP if cable length will be less than 300 feet

B. Call Box

1. 24vdc from "2500-PWR24", with battery back-up
2. Programmable with up to 2 emergency numbers
3. On-site programming
4. Recordable location message up to 18 seconds
5. Stainless steel, flush mount
6. LED light for call status indication
7. Hands-free speaker phone
8. IBC, NFPA, ADAAG code compliant
9. Cat 5e cabling, not to exceed 300' between network switches if VOIP, POE.
10. POE at 802.3af or 12vdc

C. Power Supply

1. 120v input
2. 12vdc or 24vdc output
3. Class 2 rated fuse
4. AC fail supervision (form 'C' contacts)
5. Low Battery Supervision (form 'C' contacts)

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Manufacturer recommendation shall be followed.
- B. Coordinate with electrical or install conduit with junction boxes so all mounting heights will comply with applicable codes.

3.2 TESTING

- A. Test the entire system and functions prior to Owner acceptance.

3.3 DEMONSTRATION

- A. Orientation: At time selected by Owner, provide orientation and operational training session for staff and maintenance personnel.

END OF SECTION 27 30 00