

(NOTE TO DESIGNER: These Specifications are basic minimum criteria to be met in preparing the final specifications for this section, which is the responsibility of the Designer.)

SECTION 28 26 00
ELECTRONIC PERSONAL PROTECTION SYSTEMS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Cameras.
- B. Control equipment.
- C. Cable and accessories.

1.2 RELATED SECTIONS

- A. Section 08 71 00 - Door Hardware.
- B. Section 11 12 00 - Parking Control Equipment.
- C. Section 14 20 10 - Passenger Elevators.
- D. Section 26 05 19 - Low-Voltage Electrical Power Conductors and Cables (600 V and Less).
- E. Section 28 05 00 - Common Work Results for Electronic Safety and Security
- F. Section 28 05 26 - Grounding and Bonding for Electronic Safety and Security.
- G. Section 28 05 28 - Pathways for Electronic Safety and Security.
- H. Section 28 05 53 - Identification for Electronic Safety and Security.
- I. Section 28 06 00 - Testing for Electronic Safety and Security.
- J. Section 28 13 00 – Access Control.
- K. Section 28 16 00 – Intrusion Detection.
- L. Section 28 23 00 – Video Surveillance
- M. Division 27 - Communications
- N. University of Houston Campus Design Guideline and Standards Security System Standards (latest edition)
- O. Conduit, cable tray and back boxes for this system shall be furnished and installed by the electrical contractor under the supervision of the security contractor.
- P. See Division 26 for all information relating to the fire alarm system and required relay interface to release emergency delay exit doors. The fire alarm integrator shall provide the control relays as required.
 - 1. See Division 26 for all specifications governing the performance of work associated with the installation of raceway, system junction and pull boxes and device rough-in boxes for all work shown in the Access Control System refer to the SC series security drawings.

1.3 EMERGENCY COMMUNICATION SYSTEM

- A. This Section specifies the requirements for the Emergency Call Box system for the University of Houston [Project Name]. [Insert Project description].

B. Functional Requirements

1. The Emergency Communication System (ECS) shall consist of a one button hands-free direct dial communications unit. There are two different types of units one for wall mounting and one stand alone exterior mounting. For ease of identifying these units the wall mount unit shall be designated as a Call Box (CB) and the stanchion mounted exterior unit shall be designated as a Call Tower (CT).
2. Each CB/CT shall be equipped with a red push button labeled POLICE and a black push button Labeled INFO. The Police push button shall be programmed to dial the campus police 911 line for emergencies. The INFO button shall be programmed to dial a number determined for general information requests.
3. The call boxes shall have a stainless steel faceplate with the two buttons, an LED that illuminates when the call box is answered, for the hearing impaired. It will also be fitted with a vandal resistant speaker grill. The Call Box shall be designed for flush mounting in a back box in wall. A separate blue strobe light shall be wall mounted above the call box as a location identifier. The blue light shall be normally illuminated for unit visibility. Pressing the POLICE button will cause the blue light to flash for the duration of the call. Only when the called party terminates the call will the light stop flashing.
4. The Call Tower shall consist of the Call Box faceplate mounted in a free standing vandal resistant tower with a blue strobe light mounted on its top. The blue strobe light shall function the same as the Call Box light. The faceplate shall be continuously illuminated by LEDs flush mounted in the tower above the faceplate. The Call Tower shall meet the following minimum specifications:
 - a. Dimensions - 12" W X 10" D X 110" H w/ 2" radius corners.
 - b. Weight - 450 Lbs.
 - c. Construction - .025" steel w/multi-coat rust inhibitive coating
 - d. Strobe - 1.5 million candlepower, 70 flashes per minute.
 - e. Blue light - 7 Watt high efficiency, 10,000 hour compact fluorescent.
 - f. Faceplate - Ultra bright LEDs, 100,000 Hour lifetime.
 - g. 120VAC, 5 Amp minimum circuit
 - h. Lettering - 3.25" high reflective white letters.
 - i. Compliance - CSA Certified to UL Standard 60950.
5. Camera equipped Call Towers shall be the same tower assembly as the standard unit with the addition of an arm that extends above the tower to support a pendent mounted PTZ dome camera and the blue light.
 - a. Each push button shall be provided with a momentary contact, normally open dry contact that shall be wired to an access control panel alarm input to facilitate camera selection through the ACID / DVMS integration.
 - b. Each CB shall have a dedicated PBX extension to allow the individual telephone unit to be uniquely identified by the answering party. Actual programming shall be determined by the Owner.
 - c. Call Towers shall have an analog adapter to allow a two-way communication via a VOIP system with the campus police office.
 - d. All call towers shall be equipped with an IP relay interface to facilitate transmission of the POLICE button alarm contacts over the IP network to the designated equipment room where the IP relay output contact shall be connected to an access control panel alarm input.
 - e. Call Towers shall be equipped with a media converter to convert all electrical signals to optical signals for transmission via fiber optic cable the designated equipment room. A rack mounted version of the media converter shall reconvert the signals for connection to the Ethernet.

1.4 CONTRACTOR QUALIFICATIONS

- A. Contractor shall be a certified Code Blue Phone Reseller and Installer and have the following certification:

1. At a minimum, one (1) on-site personnel shall have appropriate Code Blue Phone certification for installation, programming and troubleshooting.
2. Certification documents shall be included in all Responses to RFP/RFOs.

PART 2 - PRODUCTS

2.1 MATERIALS LIST

- A. Code Blue Call Tower - CB1-e - Interactive Voice Communication Unit
- B. Code Blue Call Tower – CB1-wb – Solar/Cellular Interactive Voice Communication Unit
- C. Code Blue Wall Mounted Call Box – CB2-e - Interactive Voice Communication Unit

2.2 FINISH

- A. The unit housing shall be fabricated of non-magnetic # 304 stainless steel, and shall be power coated after fabrication. The finish shall be uniform and free of visible defects.

2.3 GRAPHICS

- A. The graphics shall be cut from a durable engineering grade reflective vinyl for high visibility and legibility.
- B. The standard graphics text shall be “Emergency”, “Assistance”, or “Courtesy”, and placed on two sides of wall unit. Standard colors shall be white, blue and black. Customized graphics and colors shall also be available.

PART 3 - EXECUTION

3.1 MOUNTING

- A. The column shall include four 5/8” x 16” J-bolts for mounting into a 20” X 20” X 3’ concrete foundation. J-bolts shall protrude approximately 2 ½” inches from surface of foundation.

3.2 ELECTRICAL

- A. The communication device shall require no external power. The phone line, PBX extension, or a wireless communication interface shall power it. The requirements shall be 30 ma loop current at the unit, with a line resistance of less than 700 OHMS. A 22 to 26 shielded twisted pair cable shall be used. Longer cable runs shall require a heavier gauge cable. Verify manufacture requirements.
- B. The unit shall require 120 VAC and draw a maximum of 3 amperes under normal operation, 4 amps with heater.
- C. All lamps and fixtures shall be UL listed. All electrical components shall be hard wired and concealed within the column in aluminum flex conduit. All wiring and electrical fixtures comply with the standards of the National Electrical Code, UL.

3.3 WARRANTY

- A. Equipment shall be warranted against any defects in material and workmanship, under normal use, for a period of two years from date of purchase. In the event system is found by manufacturer to be defective within the warranty period, manufacturer shall repair and/or replace any defective parts, provided the equipment is returned to manufacturer.

END OF SECTION