SECTION 27 3600 – EMERGENCY BLUE LIGHT PHONES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Equipment and materials used shall be standard components that are manufactured and available for purchase as standard replacement parts as long as the product is commercially available from the manufacturer.

B. Section Includes:

1. Blue Light Emergency Phones

C. Related Sections

1. Division 26 – Electrical Specifications
2. 27 05 00 Common Work Results for Communications
3. 27 05 26 Technology Grounding Systems
4. 27 05 28 Pathways for Communications Systems
5. 27 10 00 Structured Cabling Systems
6. 28 00 00 Security Design Criteria

1.3 REFERENCES

A. NFPA 70 – The National Electrical Code

B. ADA – Americans with Disabilities Act

C. ANSI/TIA 568-C.0 – Generic Telecommunications Cabling for Customer Premise

D. ANSI/TIA/EIA 568-C.1 – Commercial Buildings Telecommunications Cabling Standard

E. ANSI/TIA/EIA 569 – Commercial Building Standard for Telecommunications Pathways and Spaces

F. ANSI/TIA/EIA 606-A – Administration Standard for the Telecommunications Infrastructure of Commercial Building; TR-42.6 - Labeling

G. ANSI/TIA/EIA 607A – Commercial Building Grounding and Bonding Requirements for Telecommunications
H. ANSI/TIA – TSB 95 – Testing Standards


J. Northwestern University Design Information Technology Building Infrastructure Requirements for Communications Systems

1.4 QUALITY ASSURANCE

A. All Column installation, configurations, setup, program and related work shall be performed by electronic technicians thoroughly trained by the manufacturer in the installation and service of the equipment provided.

PART 2 - PRODUCTS

2.1 Emergency Light Column

A. General Description:

1. The Column shall consist of a vandal-resistant free-standing stainless steel column with built-in blue light, strobe, and lighted faceplate. The column shall house an ADA-compliant, line-powered communication device manufactured by Ramtel. Externally powered devices are not acceptable.

B. Construction:

1. The Column shall:
   a. Be constructed of 0.125” thick, non-rusting, non-magnetic stainless steel; and weigh approximately 190 lbs.
   b. Measure 11” square x 108” high with 1” radius on corners.
   c. Be powder coated with power coating applied to withstand prolonged exposure to harsh environments.
   d. Have a base plate which is fully welded within the column. The base plate shall be fabricated of .375 stainless steel. There shall be a 41/2” diameter center hole for wiring access and four 7/8” diameter holes for anchor bolt clearance.
   e. Have a wiring access opening measuring 13 1/8” H x 6 5/8” W, located 20” center distance above the base of the column. The opening shall have a flush cover plate with a wall thickness of .125”, held in place by either 8-32 countersunk, tamper-resistant screws.
   f. Have an opening cut in the face of the column for mounting any Ramtel RR-Series emergency phone model. The lower edge of the opening shall slope down 30 degrees from rear to front, making the edge difficult to use as a shelf yet convenient for use as a writing surface.
   g. Have a top for convenient access to area light & strobe.
   h. Have the word “EMERGENCY” emblazoned on all four sides in 2.375” white letters.

C. Lighting

1. The column shall:
a. Have two high power blue LED lighting units mounted atop the column.
b. Have high power blue LED light units which provide a minimum luminous intensity of 155 each and shall flash no less than 62 flashes per minute when the emergency button on the communication device is pressed and continue flashing until the call has been completed. Two blue LED lights shall serve as area lights and shall always be illuminated. A deep blue polycarbonate Fresnel lens shall distribute the light in a horizontal pattern. The flash shall be bright and visible even at great distances. The lights shall be situated within the column inaccessible to vandals and weather resistant.
c. Have four clear polycarbonate lenses that measure 8 ½" x 13 ¼" x ¼" that further enclose the two high power blue LED lighting units.
d. A phone panel light consisting of a concealed array of LEDs illuminating the emergency phone faceplate at all times. The phone panel light shall be protected by a clear polycarbonate lens that is attached to the unit by two temper resistant screws.

D. Electrical

1. 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 a 30 ma loop current at the unit, with a line resistance of less than 700 ohms. A 22 to 26 gauge shielded twisted pair cable shall be used. Longer cable runs shall require heavier gauge cable.
2. The unit shall require 120 VAC and draw a maximum of 200 watts under normal operation or 300 watts with a heater.
3. All electrical components shall be push on connectors or wire nuts. All wiring and electrical fixtures comply with the standards of the National Electrical Code, and Underwriters Laboratory.

E. Mounting

1. 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 protruded approximately 2 ¼" from surface of foundation.

F. Warranty

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

G. Manufacturer / Model

1. The unit shall be a Ramtel model PLC-8A package.
PART 3 - EXECUTION

3.1 INSTALLATION

A. The Contractor shall carefully follow instructions in documentation provided by the manufacturer to ensure all steps have been taken to provide a reliable, easy-to-operate system.

B. All equipment shall be tested and configured in accordance with instructions provided by the manufacturer prior to installation.

C. The Column shall include 24-inch long J-bolts for mounting into a 24" x 24" concrete foundation. Depth to vary according to local regulations and other site-specific considerations.

D. The J-bolts shall protrude approximately 5 inches from the surface of the foundation.

E. The extension arm shall mount to the back of the Column by fitting included bolts through pre-drilled holes in the Column.

3.2 WARRANTY

A. The Column shall be warrantied against any defects in material and workmanship under normal use for a period of five (5) years from date of installation, provided that manufacturer receives a completed "Installation Certification" certifying the date on which the system has been installed. An "Installation Certification" card shall be enclosed with every unit. In the event that no "Installation Certification" is received by manufacturer, the five (5) years will commence on the date of shipment by the manufacturer.

B. The blue light and faceplate light shall be warrantied against any defects in material and workmanship under normal use for a period of twenty-four (24) months from date of installation, provided that manufacturer receives a completed "Installation Certification" certifying the date on which the system has been installed. An "Installation Certification" card shall be enclosed with every unit. In the event that no "Installation Certification" is received by manufacturer, the twenty four (24) months will commence on the date of shipment by the manufacturer.

END OF SECTION 273600