

SECTION 16600

ENERGY MANAGEMENT SYSTEM

PART 1 GENERAL

1.01 Not used

1.02 SUMMARY:

A PETCO will furnish the Energy Management System (EMS) under a National Account agreement with COMFORT SYSTEMS USA. The Contractor shall install all accessories for the Energy Management System as shown on the drawings, as specified in this Section, and as needed for a complete and proper installation including, but not limited to:

- 1 Hill-PHOENIX PowerPlus Integrated Power & Control Assembly.
- 2 Sensing devices, including temperature, light and override switches.
3. Power and control conductors and connections to the controlled equipment.

1.03 RELATED WORK: Section 15500-HVAC Systems; Section 16000-Electrical Systems.

1.04 QUALITY ASSURANCE: All materials, apparatus, equipment and installation shall comply with the most stringent standards between applicable building and electrical codes and ordinances. State Industrial Accident Commission, Underwriters' Laboratory and National Board of Fire Underwriters. All items, material and equipment shall bear the Underwriters' Laboratory Label of approval and the AFL-IBEW Union Label, if applicable.

1.05 FIELD INSTALLATION/ CHECKOUT OF ENERGY MANAGEMENT SYSTEM: COMFORT SYSTEMS USA will provide one field installation check-out, so as to verify the Energy Management System installation and operation. The scheduling of this field trip must be coordinated by the Contractor with the PETCO Project Manager so as to provide adequate completion of electrical work at the time of the COMFORT SYSTEMS USA field installation/ checkout inspection.

PART 2 PRODUCTS

2.01 ENERGY MANAGEMENT SYSTEM (EMS) EQUIPMENT AND DEVICES:

A. The Energy Management System, including DDC Controller, Relay/ Contactor Panels and HVAC Controls will be furnished by COMFORT SYSTEMS USA, in a National Account agreement (i.e. direct purchase by PETCO):

COMFORT SYSTEMS USA NATIONAL ACCOUNTS
255 Fortune Circle West, Suites E & F
Indianapolis, Indiana 46241

First Point of Contact: Dave Mercik, Operations Manager
(dmercik@comfortsystemsuse.com)
Tel 317-638-5363; Tel Direct 317-246-4277
FAX 317-246-4265

Second Point of Contact: Cory Kazmierczak, Controls Engineer
(ckazmierczak@comfortsystemsuse.com)
Tel 317-638-5363; Tel Direct 317-246-5170
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No product substitution is permitted.

- B. The Energy Management System is manufactured by COMFORT SYSTEMS USA. Some of the system components are factory installed in the Hill-PHOENIX PowerPlus Integrated Power & Control Assembly, and in most Lennox L-series HVAC units, while others are installed by the Electrical Contractor:
1. The DDC Controller and HVAC Controls will be furnished by COMFORT SYSTEMS USA and installed by the electrical contractor
 2. The COMFORT SYSTEMS USA override panel and CPU will be furnished loose for installation and final connection by COMFORT SYSTEMS USA checkout personnel.
 3. All temperature sensors, low voltage control wiring, sensor wiring and sensing devices shall be installed by the Electrical Contractor in a conduit/ junction box system provided by the Contractor. The low voltage cable may be run exposed above the ceiling and at the roof joist if the electrical code permits.

PART 3 EXECUTION

3.01 DELIVERY: The Energy Management System will be furnished to the jobsite approximately two weeks prior to the Date of Substantial Completion Date of Tenant Space Turnover to PETCO.

3.02 INSTALLATION OF ENERGY MANAGEMENT SYSTEM EQUIPMENT AND DEVICES:

- A. The electrical subcontractor shall install all provisions for the Energy Management System as indicated on the drawings.
- B. The electrical subcontractor shall coordinate with COMFORT SYSTEMS USA checkout personnel when COMFORT SYSTEMS USA provides checkout of the Energy Management System and verifies the system's field operation.

3.03 FIELD INSTALLATION/CHECKOUT OF ENERGY MANAGEMENT SYSTEM:

- A. The Contractor and electrical subcontractor shall schedule the installation/ checkout with COMFORT SYSTEMS USA for a date and time.
- B. COMFORT SYSTEMS USA System Startup Deficiency Report: Upon completion of the field checkout, the COMFORT SYSTEMS USA inspecting representative will prepare and issue a "COMFORT SYSTEMS USA System Startup Deficiency Report" to the Contractor, and will forward a copy of the report to the PETCO Project Manager for inclusion in the PETCO Inspection Punchlist.
- C. The costs associated with any subsequent field trip inspection that may be determined as being required by COMFORT SYSTEMS USA as a result of inadequate preparation for the Energy Management System, installation by the electrical subcontractor prior to the date of the field installation/ checkout inspection by COMFORT SYSTEMS USA, shall be the responsibility of the Contractor/ electrical subcontractor.

END OF SECTION