SECTION 15835

ELECTRIC HEAT

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:

- 1. Electric Cabinet Heaters and Unit Heaters.
- 2. Electric Baseboard Heaters.
- 3. Electric Heating Coils in Ductwork.
- 4. Electric Wall Insert Heaters.
- 5. Electric Radiant Heater Panels.

B. Related Sections:

- 1. Section 15010 Basic Mechanical Requirements.
- 2. Section 15050 Basic Mechanical Materials and Methods.
- 3. Section 15900 Ductwork and Accessories.
- 4. Section 15950 Controls.

1.02 REFERENCES

A. Underwriters Laboratories, Inc. (UL).

1.03 SYSTEM DESCRIPTION

A. Design Requirements:

1. General:

- a. Electric heat shall not be used unless authorized by the University.
- b. Specify that all contactors, relays, terminal boxes, thermostats and other electrical appurtenances for electric heat to be in accordance with "Electric Wiring" paragraph in Section 15050 Basic Mechanical Materials and Methods.

2. Electric Cabinet Heaters and Unit Heaters:

- a. Specify entire unit UL listed.
- b. Provide summer-winter switch to allow operation without heat when desired.
- 3. Electric Baseboard Heaters:

- a. Specify entire unit UL listed.
- b. Enclosure panel minimum 16 gage steel.

4. Electric Heating Coils in Ductwork:

- a. Specify entire unit UL listed.
- b. Provide safety control to prohibit operation without air blower operation. Consider stepped control or SCR control.

5. Electric Wall Insert Heaters:

- a. Specify entire unit UL listed.
- b. Suitable for recessed or surface mounting.

6. Electric Radiant Heater Panels:

- a. Specify UL listed.
- b. Use only for small spot problem heating solutions.

PART 2 - PRODUCTS

2.01 ELECTRIC CABINET HEATERS AND UNIT HEATERS

A. Manufacturers:

Carrier

Chromalox

Electromode

Indeeco

Markel

Modine

2.02 ELECTRIC BASEBOARD HEATERS

A. Manufacturers:

Chromalox

Electromode

Markel

Modine

Thermador

2.03 ELECTRIC HEATING COILS IN DUCTWORK

A. Manufacturers:

Brasch

Carrier

Chromalox

Indeeco

Markel

2.04 ELECTRIC WALL INSERT HEATERS

A. Manufacturers:

Chromalox Electromode Markel Thermador

2.05 ELECTRIC RADIANT HEATER PANELS

A. Manufacturers:

Aztec International Ltd. Markel

PART 3 - EXECUTION

3.01 INSTALLATION

A. In general, for project specifications, remove "Design Requirements" sub-paragraph A in Part 1, paragraph 1.03 "System Description" of this Design Guide and use list to expand on specific requirements of installation for each product specified.

END OF SECTION 15835