PART 1 GENERAL

1.01 Name equipment using the UAF labeling conventions supplied by FS. Coordinate with the FS/DDC project manager for numbers in UAF power distribution database. Phenolic name plates for equipment may be provided by FS.

1.02 Label all electrical distribution equipment with nameplates.

1.03 Label all conductors at the point of utilization and all conductors passing through pull or junction boxes with tags having clearly legible, machine printed data identifying the panel and circuit number, or other appropriate identification.

A. Exception: Conductors in a pull or junction box which contains only an individual branch circuit or a single multi-wire branch circuit whose conductors are terminated on a multi-pole breaker or contiguous breakers need not be tagged or labeled.

1.04 Indelibly mark the outside cover of each junction box with the breaker number and panel identity of the source of power to each circuit within the box.

1.05 Provide typed directory with clear plastic cover in all distribution panels. Provide numbering for terminals on terminal strips in the terminal enclosure which identifies the origin, function and destination of each conductor.

1.06 Color-code all raceway system junction boxes (except those visible in finished areas) by spray paint:

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>A.</td>
<td>Emergency</td>
<td>Yellow</td>
</tr>
<tr>
<td>B.</td>
<td>Fire Alarm and Fire Pump</td>
<td>Red</td>
</tr>
<tr>
<td>C.</td>
<td>Intercom-Telephone-Clock</td>
<td>Blue</td>
</tr>
<tr>
<td>D.</td>
<td>480/277V</td>
<td>Orange</td>
</tr>
<tr>
<td>E.</td>
<td>208/120V</td>
<td>White</td>
</tr>
<tr>
<td>F.</td>
<td>DDC System</td>
<td>Green</td>
</tr>
</tbody>
</table>

1.07 Fire systems:

A. Provide a label at the fire alarm control panel which identifies the panelboard and circuit number that supplies the control panel. Provide a red, per NFPA, label adjacent to the circuit inside the panelboard which identifies the circuit breaker that feeds the control panel.
B. Provide a red phenolic label at the sprinkler system fire pump which identifies the source and location of the pump’s power supply. Provide a red, per NFPA, label adjacent to the motor control/starter which identifies the source and location of the motor control/starter power supply.

1.08 Provide a red phenolic label at the sprinkler system fire pump which identifies the source and location of the pump’s power supply. Provide a red, per NFPA, label adjacent to the motor control/starter which identifies the source and location of the motor control/starter power supply.

1.09 Label shunt trip switches on exterior of building: "EMERGENCY ELECTRICAL DISCONNECT SWITCH INSIDE".

PART 2 PRODUCTS

2.01 Nameplates: Melamine plastic, ⅛ inch thick, black with white center core unless noted otherwise, with matte finish and square corners. Minimum size: ¾ inch X 2 inch Minimum lettering: ¼ inch.

2.02 Wire and cable markers: Wrap-on labels, cloth markers, or tubing type.

2.03 Outlets: Clear adhesive Mylar or plastic type, minimum \( \frac{3}{16} \) inch size with black letters by a Kroy lettering type device.

2.04 Underground Plastic Line Marker: 4 inch-wide plastic tape with metallic core with suitable legend describing buried electrical lines.

PART 3 EXECUTION

3.01 Nameplate lettering: Aligned and engraved into the core.

3.02 Nameplate attachment:

A. Mechanically fasten nameplates using rivets. Mechanical fasteners to have no sharp edges or points which will damage conductors or lacerate personnel.

B. Adhesives for permanent fastening not allowed.

1. Exception: Nameplates may be mounted with adhesive tape on indoor equipment which does not generate heat. Basis of Design: Johnson Plastics, \( \frac{1}{32} \) inch by 216 linear feet. Part number is FT-31; contact phone number is 1-800-869-7820.
3.03 Distribution/Branch Panelboard Circuit Labeling:

A. Provide typed directory cards in a holder with a transparent plastic cover: Odd numbers left and even numbers right.

B. Use room numbers from the finished construction - not necessarily as indicated on the drawings.

C. Provide circuit number labels on all ground, neutral and line voltage conductors inside the panelboard. Label within 6 inch of termination but so as to be visible without removing panel dead front.

D. Label conduits exiting panel with contained circuits:
   1. In utility areas label conduits where exiting panel.
   2. In finished areas, label conduits at closest accessible location, unless in the closest accessible location there is a labeled junction box.

3.04 Branch and Distribution Panelboard nameplates shall contain the following information:

A. Line 1: Panel Name—Contact FS/DDC for naming convention guidelines and coordination.

B. Line 2: Source from which panelboard is fed

3.05 Disconnects, Starters, VFD’s, Contactor nameplates shall contain the following information:

A. Line 1: Load Served (use nameplate name of equipment) —Contact FS/DDC for naming convention guidelines and coordination.

B. Panelboard and circuit number from which the device is fed.

C. Voltage, Phase, and fuse size or circuit breaker.

3.06 Exterior underground power, control, signal, and communication lines:

A. Install continuous underground plastic line marker located directly above line at 6 inch to 8 inch (150 to 200 millimeters) below finished grade.

B. Where width of multiple lines installed in a common trench or concrete envelope does not exceed 16 inch (400 millimeters) overall, use a single line marker.

C. Install line marker for underground wiring, both direct-buried cables and cables in raceway(s).

D. Label each underground conductor with its circuit number.

END OF SECTION