### TYPE II & IV LOAD CENTER REQUIREMENTS

**NOTES:**

1. The load center cabinet shall be a freestanding and self-supporting National Electric Manufacturers Association (NEMA) Standard 250, "Enclosure for Electrical Equipment - 1000 Volt Maximum" or Underwriters Laboratories Standard UL50, "Enclosures for Electrical Equipment," NEMA 3, 3R or 6 rated load center cabinet Type II or Type IV, per the project plans details. The cabinet and doors shall be made of 5052-H32 sheet aluminum alloy, thickness 0.025 inch.

2. Use hardarc welding method for all external and internal continuous welds. Welds shall be free of cracks, blow holes and other irregularities. The inside and outside edges of cabinet shall be free of burrs and provide a smooth, uniform and natural aluminum finish.

3. Bolt-on circuit breakers shall be used.

4. The cabinet door openings shall be double-hung on all (4) four sides to increase strength around the openings and to prevent any liquid or dirt from entering the enclosure when the door is opened.

5. Gasketing shall be provided on all door panels to provide a weather tight seal that conforms to the applicable requirements of UL 508 Table 212, or equivalent independent lab test method.

6. 200 series stainless steel 3/20 carriage bolts and 300 series stainless steel lock nuts shall be used to bolt hinges to the cabinet and the door.

7. The hinges shall be made of 075-14 gauges 300 series stainless steel, the hinge pins are to be welded at the top and bottom to render them tamper-proof.

8. Bolt holes shall be gasketed in manner which meet or exceed the requirements of the cabinets NEMA and UL or other Independent lab rating.

9. See the Specifications for additional construction and material requirements.

10. See T.S. 3-9 for minimum 2-position door stop details.

11. Install two 3/8" Dia by 10' copper clad ground rod with approved clamp. The first ground rod is to be in the foundation with the second at least 6 ft away on the outside.

12. In unpaved areas a raised PCC pad 36' x 4' x width of foundation, shall be placed in front of the cabinet. See pad details per applicable T.S. 2 series drawings.

13. Use an approved Silicon Sealer RTV Type Grey in color or Clear, to seal between cabinet and extension if necessary) and cabinet and foundation and any other penetrations in the cabinet.

14. Provide at least a 36' x 36' permanent clear working space centered on the meter socket behind the load center cabinet. Coordinate with the serving electrical utility to verify this and other service requirements.

15. These notes apply to the type II and IV load center cabinets.

16. The contractor shall verify and coordinate the electrical service with serving utility. The electrical service shall be installed according to the utilities published requirements.

17. Once the lighting system has been tested all of the conduits entries into the load center cabinet shall be sealed with a pliable and removable duct seal that is torred around all conductors.

### Enclosure Types on Exposure Ratings per NEMA 250/UL50

<table>
<thead>
<tr>
<th>Type of Rating</th>
<th>Locations of Use</th>
<th>Destinations</th>
<th>Degree of Protection Against</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Outdoor</td>
<td>Weather-Proof/Raintight</td>
<td>Windblown, Dust, Rain, Sleet, Ice</td>
</tr>
<tr>
<td>3R</td>
<td>Outdoor</td>
<td>Weather-Proof/Raintight</td>
<td>Same as 3; but excluding Dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Splashing and hose directed water</td>
<td>Windblown, Dust, Ice</td>
</tr>
</tbody>
</table>

**NOT TO SCALE**

**NOTES FOR TYPE II AND IV LOAD CENTER CABINETS**

**T.S. 3-0**

**T.S. 100**