1. All materials and construction shall conform to the manufacturer's requirements and to the project specifications.

2. The hardware used to connect the pole to the base, and the base to the foundation, shall meet all applicable structural and installation requirements as prescribed by the pole and Breakaway base manufacturer.

3. Poles shall be mounted on a breakaway base with 4 high-strength bolts (ASTM F3125 or A325N), utilizing 1 hex nut, 1 flat washer, and 1-250 x 0.5 x 8" thick steel washer per bolt, all furnished with the breakaway base.

<table>
<thead>
<tr>
<th>Base Type</th>
<th>Bolt Size</th>
<th>Pole Types</th>
<th>Bottom Bolt Circle</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1&quot; Dia x 4&quot;</td>
<td>Aluminum S, C and Steel A and S</td>
<td>12&quot;</td>
</tr>
<tr>
<td>3</td>
<td>1-1/2&quot; Dia x 4&quot;</td>
<td>Aluminum H, I and T</td>
<td>111/2&quot;</td>
</tr>
</tbody>
</table>

4. A bolt circle smaller than specified shall not be used except when specifically approved by the Engineer. If a smaller bolt circle is approved, all field washers shall be used in a manner approved by the manufacturer.

5. All bolts shall be installed and torqued according to the breakaway base manufacturer's requirements.

6. The base shall be installed such that the base access door or cover is positioned under the most sun, or 90 degrees to the most sun, behind the most sun side of the pole. The door or cover opening shall always be perpendicular to the direction of traffic.

7. An un-fused connector shall be used for each conductor in the breakaway base, except for the bond which shall be connected directly to the base ground lug. For details see T.5, Series 1. The fused connections shall be in the junction or pull box adjacent to the pole foundation.

8. The base door or cover shall have the base and/or pole manufacturer's name on it. The bolt shall be secured with standard 3/8-20 stainless steel hex screws or vandal-resistant screws. All screws shall be furnished with the base. The door can be hinged, or be a removable panel.

9. All 1/4" x 1/4" thick washers shall be zinc-coated or galvanized. All other bolts, nuts & washers shall be galvanized per ASTM A315.

10. The bases shown are two piece weldments that are in conformance to ASTM B 108 aluminum alloy permanent mold castings.

11. Certifications shall be provided by pole and breakaway base manufacturer when requested. Certifications shall cover material used, FMMA crashworthiness approval, and conformance to loading criteria stated herein.

12. The caution and use instructions label shall be secured inside the base on the wet opposite of the access door plate or on the cover itself.

13. The base, as supplied and installed, shall conform to all applicable AASHTO, FMMA, and FMMA requirements for trafficability bases for roadway light poles.

14. The base depicted in these drawings is made by the Akron Foundry. This is not intended to limit or restrict competition, but to establish the needed performance and function of breakaway bases.

15. These bases may be used for non-breakaway applications. Prior to installation, the Contractor shall consult with the manufacturer regarding loading, installation, and application.

16. Top bolt circles less than 12" shall use 250 x 0.5 x 8" thick steel washers. Bottom bolt circles of 12" diameter shall use 250 x 0.5 x 8" thick steel washers.

**LOADING CRITERIA**

<table>
<thead>
<tr>
<th>Base Type</th>
<th>Max Total Weight</th>
<th>Pole</th>
<th>Mast Arm and Luminaires</th>
<th>Akron Designations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>550 lb</td>
<td>350 lb</td>
<td>200 lb</td>
<td>TB2-17</td>
</tr>
<tr>
<td>3</td>
<td>900 lb</td>
<td>600 lb</td>
<td>300 lb</td>
<td>TB3-17</td>
</tr>
</tbody>
</table>

**LOADING CRITERIA NOTES:**

1. The loading criteria should be regarded as minimum. Actual criteria shall be as determined by the base and/or pole manufacturer.

2. Highway Light Pole & Mast Arm/Luminaires combinations which exceed this loading criteria must be tested and FMMA certified in accordance with the applicable AASHTO specifications, NCHRP, and FMMA requirements.