**TOLERANCE**

ASTM designations as noted

**Rise**

Arm Length

C

**DW:**

2

Plate

NOTES:

/8" in 12"

**DISCLAIMER:**

The use of this standard is governed by the "Texas Engineering Practice Act." No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

**DATE:**

**FILE:**

1'-6"   

2'-6"  

2'-0"  

5'-6"  

11'-6"

Nominal

Arm Length

Arm Rise

Deviation from flat

Spacing between holes

2-½" O.D.

LA-1

2-½" O.D.

LA-2

2-½" O.D.

LA-3

POLE SIMPLEX DETAIL®

SECTION B-B

SIXECTION A-A

SIMPLEX ATTACHMENT DETAIL

POLE TOP

HANDHOLE

**POLE SIMPLEX DETAIL®**

**SECTION C-C**

**SIDE**

**ELEVATION**

**SECTION B-B**

**ARM SIMPLEX DETAIL®**

**ELEVATION**

**SECTION C-C**

**UPPER SIMPLEX FITTING** (Gusset not shown for clarity)

**LOWER SIMPLEX FITTING** (Gusset not shown for clarity)

**LUMINAIRE ARM DIMENSIONS**

<table>
<thead>
<tr>
<th>Nominal Arm Length</th>
<th>Arm Length Rise</th>
<th>Rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'-0&quot;</td>
<td>3'-0&quot;</td>
<td>2'-0&quot;</td>
</tr>
<tr>
<td>6'-0&quot;</td>
<td>5'-0&quot;</td>
<td>4'-0&quot;</td>
</tr>
<tr>
<td>8'-0&quot;</td>
<td>7'-0&quot;</td>
<td>6'-0&quot;</td>
</tr>
<tr>
<td>10'-0&quot;</td>
<td>9'-0&quot;</td>
<td>8'-0&quot;</td>
</tr>
<tr>
<td>12'-0&quot;</td>
<td>11'-0&quot;</td>
<td>10'-0&quot;</td>
</tr>
</tbody>
</table>

**ARM ASSEMBLY FABRICATION TOLERANCES TABLE**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arm Length</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>Arm Rise</td>
<td>1/16&quot;</td>
</tr>
<tr>
<td>Deviation from flat</td>
<td>/8&quot; in 1/2&quot;</td>
</tr>
</tbody>
</table>

**NOTES:**

1. Any of the materials listed for plates may be used where the drawings do not specify a particular ASTM designation.

2. ASTM must be suitable for forging and also meet minimum tensile strengths of 60 ksi, minimum yield of 35 ksi, and elongation in 2 inches of 22 percent.

3. A325, A1008 HSLAS-F, and A1011 HSLAS-F materials may have higher yield strengths but shall not have less elongation than the grade indicated.

4. Dimensional tolerances are given to show acceptable variation in design. All of a particular arm length shall have the same dimensions within specified tolerances.

5. Each pole simplex fitting shall be supplied with 2 bolts and 2 lock washers of the size specified. The bolts and lock washers shall be secured to the pole with the other hardware items called for in the plans.

6. Proposed deviations in arm simplex dimensions or materials must be submitted to the Department for approval.

7. A welded nonhinge frame is permissible. Maximum of two (2) CJP weld splices is allowed.

**MATERIALS**

- **Pole or Arm Simplex**
  - ASTM A27 Gr 65-35 or Gr 70-36, A148 Gr 80-50, ASTM Gr 1011 Gr 50 or A36 (Arm Only)
- **Arm Pipes**
  - ASTM A516 Gr 70 or A53 Gr A or B, A500 Gr B, or A1011 HSLAS-F or A572 Gr 50 or A36 (Arm Only)
- **Arm Simplex and Gusset Plates**
  - ASTM A36, A572 Gr 50 or A588 (Arm Only)
- **Misc.**
  - ASTM designations as noted

Texas Department of Transportation

**ROADWAY ILLUMINATION POLES**

**RIP(3)-19**