

ROAD COMMISSION FOR OAKLAND COUNTY

SPECIAL PROVISION
FOR
STREET SIGN POST

RCOC/TS:AB

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RCOC20SP810D

ORG:01-08-25

a. Description

This special provision describes the installation and material requirements for back to back street name sign blades mounted to square tube post extension and attached to u-channel post.

This work shall be done in accordance with section 810 of the *Michigan Department of Transportation 2020 Standard Specifications for Construction* and this special provision.

b. Materials

1. Steel Square Tubes (1.25-inch X 1.25-inch section, 4-foot-long) for Telescopic U-channel Sign Extensions. Used for the installation of the street name signs (D3-1) back to back.
2. Shall be roll formed from 12 Gage (0.105 inch) cold rolled steel, the square tubing shall provide a minimum yield strength of 60,000 psi cold forming.
3. Galvanized, zinc coated, conforming to ASTM A525 coating designation G- 90, with added chemical treatments for enhanced corrosion protection. In addition, a clear corrosion inhibitor coating shall be applied after fabrication.
4. Hole diameter shall be 11/32 inch plus or minus 1/64 inch on 1-inch centers on all four sides. Holes shall be on centerline of each side in true alignment and opposite to each other. Tolerance of the hole spacing shall be plus or minus 1/8 inch in 10 feet.

The finished posts shall meet the requirements for the length and cross section specified herein. The post shall be straight and shall have a smooth uniform finish, free from cracks, flaws, injurious seams, laps, blisters, ragged and imperfect edges, or other defects affecting their strength, durability or appearance. The bolt holes shall be punched in a manner that the face of the post shall have a smooth even surface. All holes and cutoff ends shall be free from burrs.

Table 1 - Section Properties

| Size (L x W) | Wt. Per 4-foot sides (Lbs.) | Area (In²) | Moment of Inertia (In⁴) | Section Modulus (In³) | Radius Gyration (In) |
|-------------------------|--|------------------------------|---|---|---------------------------------|
| 1.25" x 1.25" | 1.427 | 0.315 | 0.070 | 0.112 | 0.472 |

5. Tolerances

- A. Length: The length shall be 4 ft plus or minus 1/4 inches.
- B. Straightness: Permissible variation in straightness is 1/16 inch in 3 feet.
- C. Convexity and Concavity: Measure in the center of the flat sides, tolerance is plus or minus 0.01 inch applied to the specific size determined at the corner.
- D. Wall Thickness: Permissible variation in wall thickness is plus 0.011 inch or minus 0.008 inch.
- E. Corner Radius: Standard corner radius shall be 5/32 inch, plus or minus 1/32-inch

Table 2 - Tolerances

| | |
|---|-------------|
| Nominal Outside Dimensions (inches) | 1.25 x 1.25 |
| Outside Tolerance All Sides at Corners (inches) (a) | +/- 0.006 |
| Squareness Tolerance (inches)(b) | +/- 0.007 |
| Twist Permissible (inches) (c) | 0.050 |
| a. Measured at least 2" from the end of tube b. Tubing may have sides failing to be 90 deg. To each other by the Tolerance listed. c. Twist is measured by holding down the edge of one end of a square tube on a surface plated with the bottom side of the tube parallel to the surface plate and noting the height that either corner on the opposite end of the bottom side is above the surface plate. | |

c. Construction

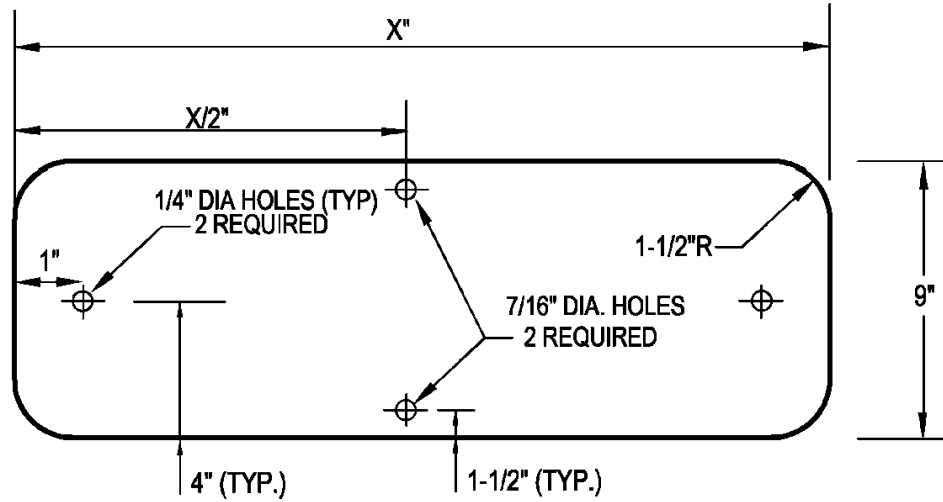
Proper installation of street signs blades and square tube post is required for this pay item. St Sign Post, Ea. Sign dimensions, hole locations and sizes shall be as shown in the included details for 9-inch and 12-inch street name blanks. Height from ground to the bottom of the lowest sign blade shall be 10 feet. Use 3/8- inch diameter universal head aluminum drive rivets to attach the sign blade to the post (2 each sign blade). Use 3/16-inch diameter Brazier head aluminum rivets to attach the sign blades back to back (2 each for 9-inch blade, 4 each for 12-inch blade).

d. Measurement and Payment

The completed work, as described will be measured and paid for at the contract price using the following pay item.

| Pay item | Pay Unit |
|--------------------|-----------------|
| St Sign Post | Each |

St Sign Post will be paid for each completed street sign installation. Payment includes all materials labor and equipment required for installation of square tube posts. All labor, equipment and hardware required for sign blade installation to square tube post. Install at locations shown on plans or as directed by Engineer. Street signs and u-channel posts will be paid for separately.



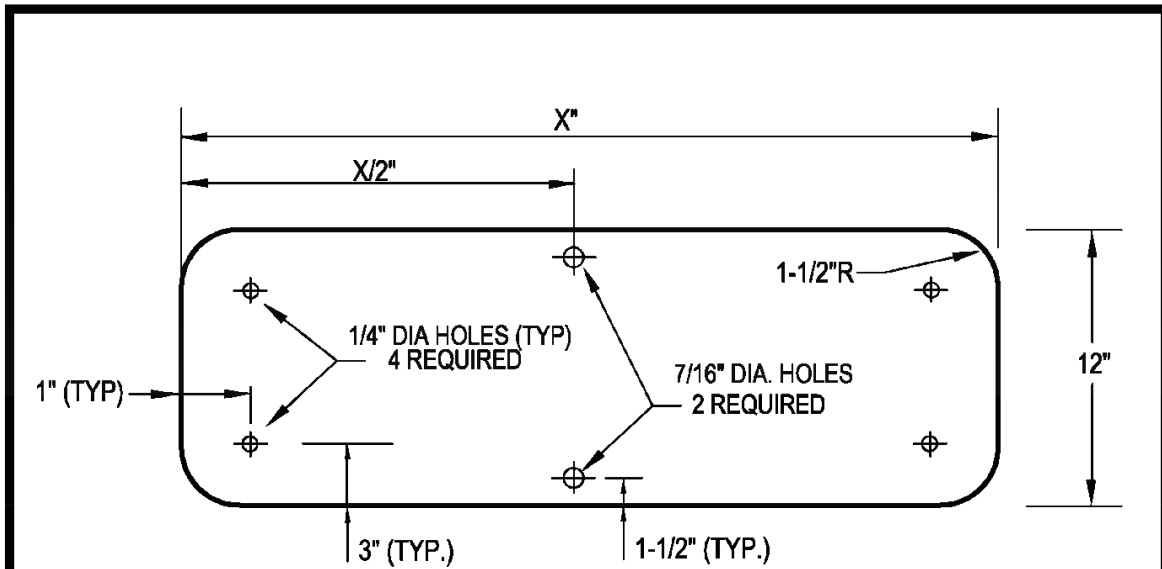
| X (INCH) | X/2 (INCH) |
|----------|------------|
| 24 | 12 |
| 30 | 15 |
| 36 | 18 |
| 42 | 21 |
| 48 | 24 |

NOTES:

1- THIS DRAWING IS FOR THE USE IN STREET NAME SIGNS. THESE SIGNS ARE MADE OF ALUMINUM GAUGE 63.

2- THERE ARE 2 HOLE SIZES REQUIRED. 2 HOLES 7/16" DIA. ON THE CENTER, AND 2 HOLES 1/4" DIA ON THE SIDES.

| | | | |
|--|----------------------------------|-------------------|------------------------------------|
| <p>ROAD COMMISSION</p> <p>for OAKLAND COUNTY</p> <p>Waterford, Michigan 48328</p> | <p>TRAFFIC-SAFETY DEPARTMENT</p> | | <p>9" STREET NAME BLANK</p> |
| | <p>DWN PC DATE 3/9/11</p> | <p>SCALE</p> | |
| | <p>CKD GW APPR CK</p> | <p>SHT 1 OF 1</p> | |



| X (INCH) | X/2 (INCH) |
|----------|------------|
| 24 | 12 |
| 30 | 15 |
| 36 | 18 |
| 42 | 21 |
| 48 | 24 |
| 54 | 27 |

NOTES:

1- THIS DRAWING IS FOR THE USE IN STREET NAME SIGNS. THESE SIGNS ARE MADE OF ALUMINUM GAUGE 63.

2- THERE ARE 2 HOLE SIZES REQUIRED. 2 HOLES 7/16" DIA. ON THE CENTER, AND 4 HOLES 1/4" DIA ON THE SIDES.

| | | | |
|--|----------------------------------|-------------------|--|
| <p>ROAD COMMISSION for OAKLAND COUNTY Waterford, Michigan 48320</p> | <p>TRAFFIC-SAFETY DEPARTMENT</p> | | <p>12" STREET NAME BLANK</p> |
| | <p>DWN PC DATE 3/9/11</p> | <p>SCALE</p> | |
| | <p>CKD GW APPR CK</p> | <p>SHT 1 OF 1</p> | |