# LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT SPECIFICATIONS

SQUARE STEEL TUBULAR SIGN POSTS

Approved for Maintenance Division

#### **DESCRIPTION:**

This specification covers the minimum requirements for square steel tubular sign posts. Posts shall be perforated, telescopic, and meeting the requirements of this specification.

#### **MATERIAL:**

Post base material shall be hot rolled carbon steel conforming to either ASTM A1011 SS, Grade 50 or ASTM A653 SS, Grade 50, Class 1.

Posts shall be welded by high frequency resistance welding and externally scarfed.

#### **COATINGS:**

Steel shall be hot-dipped galvanized, inside and out, in accordance with ASTM A653, G90 and welds and end cuts shall be hot zinc coated. Posts shall have a chromate conversion coating applied after all galvanizing coatings have been applied. Post shall have a clear organic polymer topcoat. All coatings shall be applied in accordance with the coating manufacturers' recommendations.

#### **TELESCOPING:**

Finished posts shall be able to freely telescope with all consecutive sizes without the necessity to match any particular face to any other face. Posts shall be straight with a variation of  $\pm 1/16$  inch in 3 feet. Posts shall have a smooth, uniform finished with the holes and ends free of burrs. Ends shall be cut square.

#### **STRENGTH:**

Finished posts shall have a minimum yield strength of 60,000 psi

#### **DIMENSIONS:**

### **Perforations**

Posts shall be perforated with 7/16 inch holes with a variance of +/- 1/32 of an inch on 1 inch centers. Holes shall be on the centerline of all four (4) sides for the full length of the post and must be in true alignment both directly opposite each other and diagonally. When telescoping, the holes must line-up on all four (4) sides.

## **Tolerances**

All lengths shall have a tolerance of +1" or -0.25" and all thicknesses shall have a tolerance of +/-0.011".

## Minimum Weight per Foot and Lengths

2" x 2" 14 Gauge posts (0.083") posts shall have a minimum weight of 1.85 lbs. per foot and be provided in the following lengths:

- **Product ID 50500** 6 Foot
- **Product ID 50501** 7 Foot
- **Product ID 50502** 8 Foot
- **Product ID 50503** 9 Foot

- **Product ID 50504** 10 Foot
- **Product ID 50505** 11 Foot
- **Product ID 50506** 12 Foot
- **Product ID 50507** 13 Foot
- **Product ID 50508** 14 Foot

2" x 2" 12 Gauge posts (0.105") posts shall have a minimum weight of 2.30 lbs. per foot and be provided in the following lengths:

- **Product ID 53266** 12 Foot
- **Product ID 53267** 14 Foot

 $2 \frac{1}{4}$ " x  $2 \frac{1}{4}$ " 12 Gauge (0.105") posts shall have a minimum weight of 2.60 lbs. per foot and be provided in the following length:

• **Product ID 50509** – 3 Foot

#### **ACCEPTANCE AND CERTIFICATIONS:**

The Mill Test Certificate(s), Material Datasheet(s) and a Certificate of Compliance must be supplied with each shipment.

Mill Test Certificate Heat Number(s) must match the Heat Number(s) on the delivered product. If traceability is not visible on the final product the shipment will be rejected.

Material Datasheets must indicate that the posts have a chromate conversion coating and a clear organic polymer topcoat.

Certificate of Compliance must state that the material supplied conforms to the requirements of this specification.

Certificates will be kept on file by the Department.

Prior to acceptance, each shipment shall be visual inspected by DOTD to review adherence to the specifications. Any material that fails to conform to any part of this specification shall be rejected. Rejected material must be removed and replaced with acceptable material at no cost to the Department.

#### **MATERIAL PERFORMANCE:**

Posts shall remain as specified without corrosion or other defects for a period of twelve (12) months after final acceptance of material. Material that does not meet the requirements of this specification during the twelve (12) month period must be replaced, at no cost to the Department, with new material. Replacement material shall show no signs of corrosion or defects within the remaining portion of the original twelve (12) month period.