

SECTION 02865 TRAFFIC SIGNS

PART I: GENERAL

1.1 GENERAL REQUIREMENTS

- A. Requirements for furnishing and installing signs for traffic control.

1.2 MEASUREMENT AND PAYMENT

- A. Unit Prices:
 - 1. Payment for traffic signage is on a per each basis per sign type.
 - 2. Refer to Section 01270 – Measurement and Payment for unit price procedures.
- B. Stipulated Price (Lump Sum):
 - 1. If Contract is Stipulated Price Contract, payment for work in this Section is included in Total Stipulated Price.

1.3 REFERENCES

- A. ASTM – American Society for Testing and Materials.
 - 1. ASTM A153 – Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - 2. ASTM A307 – Standard Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength.
 - 3. ASTM B209 – Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate.
 - 4. ASTM B449 – Standard Specification for Chromates on Aluminum.
 - 5. ASTM B695 – Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel.
 - 6. ASTM D4956 – Standard Specification for Retroreflective Sheeting for Traffic Control.
- B. CFTS – City of Friendswood Technical Specifications.
- C. TxDOT – Texas Department of Transportation.
 - 1. Department of Materials Specification DMS-7110 Aluminum Sign Blanks.
 - 2. Department of Materials Specification DMS-8300 Sign Face Materials.
 - 3. Standard Specifications for Construction of Highways, Streets and Bridges Item 636 – Aluminum Signs (Type A).
 - 4. Texas Manual on Uniform Traffic Control Devices (TMUTCD), Latest Edition.

1.4 SUBMITTALS

- A. Conform to requirements of Section 01330 – Submittal Procedures.
- B. Submit manufacturer's product data concerning following materials for approval:

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1. Sign Blanks.
 2. Facing materials.
 3. Mounting hardware and poles.
- C. Submit manufacturer's certification that all signage meets requirements in this Technical Specification.

PART II: PRODUCTS

2.1 ALUMINUM SIGN BLANKS

- A. Aluminum sheet or coil sign blanks shall meet all requirements of TxDOT Standards Specification Item 636, TxDOT DMS-7110 Aluminum Sign Blanks and ASTM B209, Alloys 6061-T-6 or 5052-H38.
- B. Sign blanks made from sheet or coil shall be free of buckles, warps, dents, cockles, burrs and other defects and must be a plane surface. Sign blank thickness shall be eight-hundredths inch (0.08 In) in thickness.
- C. Treat all sign blanks fabricated from sheet and coil with a chromate chemical process resulting in a coating meeting the requirements of ASTM B449, Class 2. The coating shall be light colored, tight and free from powdery residues.
- D. Manufacturer shall furnish mill test reports for aluminum sheet or coil which reflect the chemical and physical properties of the aluminum.

2.2 SIGN MOUNTING HARDWARE AND ADHESIVES

- A. All material for sign posts and mounting hardware shall be galvanized Steel and be in compliance with ASTM A307, ASTM A153 and ASTM B695.
- B. Sign posts shall be two and three-eighths inches (2-3/8 In) in outside diameter galvanized steel.
- C. Sign Post mounting shall be "Pos-Lok" or equal system consisting of sixteen inch (16 In) sleeve and removable wedge.
- D. Pipe and post clamp castings and miscellaneous fasteners shall be verified by manufacturer's certifications stating that the material meets all applicable requirements.

2.3 FACE MATERIALS

- A. All materials are to be certified by lot or shipment that material supplied meets requirements listed in these Specifications. Material shall also comply with ASTM D4956 and TxDOT DMS 8300.
- B. Sign face materials shall be processed, applied and stored according to the manufacturer's recommendations. Sign face materials shall perform for a minimum of ten years (10 Yrs).
- C. The Project Manager shall reject any sign and or face material for the following reasons:
 1. Cracks discernible with the unaided eye from the drivers position

- while in an outside lane at a distance of fifty feet (50 Ft) or greater from the sign.
2. Peeling in excess of one-quarter inch (1/4 In).
 3. Shrinkage in excess of one-eighth inch (1/8 In) total per forty-eight inches (48 In) of sheeting width.
 4. Fading or loss of color to the extent that color fails to meet the requirements of ASTM D4956 or TxDOT DMS 8300.
 5. In non-construction zone – loss of reflectivity to a level eighty percent (80%) of the minimum values as specified in ASTM D4956.
 6. In construction zone – loss of reflectivity to a level sixty percent (60%) of the minimum values as specified in ASTM D4956.
 7. Face consists of pressure-activated material of either diamond or prismatic vinyl.

2.4 STREET NAME SIGNS

- A. Street name signs shall conform to the applicable City of Friendswood Standard Details, and to TxDOT Specifications where applicable.

PART III: EXECUTION

3.1 INSTLLATION

- A. All signs and their installation shall be accordance with the latest edition of the TMUTCD Texas Manual on Construction Traffic Control Devices (TMUTCD).
- B. All signs shall be installed at the locations shown on the Drawings or as directed by the Project Manager.
- C. Sign Posts shall be set a minimum of three feet (3 Ft) in depth in a twelve inch (12 In) diameter hole filled with concrete as specified in Section 03300 – Structural Concrete.
- D. All installation and materials shall conform to all applicable requirements specified in Section 01430 – Project Signage.

END OF SECTION