

SECTION 02430 – STRUCTURAL PLATE PIPE

(Follow all instructions and make all edits with “Track Changes” turned on. If there are no instructions [purple text] above a subsection, paragraph, sentence, or bullet, then include it in the Project. Delete all purple text before preparing the final document. All other modifications to this Section will require ODOT Technical Resource and State Specifications Engineer approval.)

Replace Section 02430 of the Standard Specifications except for the Section number and title with the following:

Descriptions

02430.00 Scope - This Section includes the requirements for steel and aluminum alloy plates and hardware for structural plate pipe.

Materials**02430.10 Galvanized Steel Plates:**

(a) General - Furnish galvanized steel plates for structural plate pipe according to the requirements of AASHTO M 167 (ASTM A761).

(b) Plates for Pipe Arches - Form an arc between 180 and 155 degrees with the top plates. Form an arc between 50 and 10 degrees with the bottom plates. Join the top plates at each end to the bottom plates with corner plates to form an arc with a radius between 16 inches and 21 inches or between 29 inches and 34 inches, as applicable, and forming an arc between 87.5 and 75 degrees.

(c) Forming and Punching Plates - Form plates to provide lap joints. Punch the bolt holes so that all plates with the same dimensions, curvature, thickness, and number of bolts per foot of seam are interchangeable. Curve each plate to the proper radius so that the cross-sectional dimensions of the finished Structure is as shown or as specified.

Fabricate bolt holes according to AASHTO M 167. Provide additional bolt holes for special conditions of installation when specified or shown.

(d) Sloped and Skewed Ends - Cut plates for forming sloped ends, skewed ends or both, to give the angle of Slope or skew shown. Furnish edges free from oxide and burrs when burnt. Legibly identify each cut plate to designate its proper position in the finished Structure.

02430.20 Aluminum Alloy Plates - Furnish aluminum alloy plates for structural plate pipe according to the requirements of AASHTO M 219 (ASTM B746). Fabricate according to 02430.10(b) through 02430.10(d).

02430.90 Bolts, Nuts, and Washers - Furnish bolts, nuts, and washers for use with galvanized steel structural plate pipe according to the requirements of AASHTO M 167 (ASTM A761) and galvanized according to AASHTO M 232 (ASTM A153).

Furnish bolts, nuts, and washers for use with aluminum alloy structural plate pipe according to the requirements of AASHTO M 219 (ASTM B746) and galvanized according to AASHTO M 232 (ASTM A153).

02430.95 Acceptance - Acceptance of structural plate pipe and hardware is according to 00165.35 and this Section.