The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any of this standard to other formats or results resulting from its use.

**FLANGE JOINT DETAIL**

*FLANGE WIDTH TRANSITIONS*

*FLANGE THICKNESS TRANSITION*

**TYPES OF FABRICATED STEEL GIRDERS**

*OPTION WITH PCP*

**STUD CONNECTOR DETAILS**

*WELDED SHOP SPLICE DETAILS*

**WEB SPLICE**

**WELDED FIELD SPLICE DETAILS**

**BOLTED SPLICE DETAIL**

**GENERAL NOTES:**

- Designed according to AASHTO LRFD Specifications.
- For sanitary, weathering steel bridges, provide A709 Gr 50W shear for diaphragms, cross-frames, plate stiffeners, or gusset plates unless noted otherwise on the span details. Provide A490 Round HSS for Split-Pipe Stiffeners unless noted otherwise on the span details. Minimum wall thickness for round HSS is 0.71. Provide A325 Erection Bolts with two F436 hardened washers and one A563 Gr C3 or DOT Heavy Hex nut each.

- For painted bridges, provide A709 Gr 50 or 50W, or A586 steel for diaphragms, cross-frames, plate stiffeners, or gusset plates unless noted otherwise on the span details. Provide A490 Gr B or A586 Round HSS for Split-Pipe Stiffeners unless noted otherwise on the span details. Minimum wall thickness for round HSS is 0.71. Provide galvanized A325 Erection Bolts with two F436 hardened washers and one A563 Gr C3 or DOT Heavy Hex nut each. Provide galvanized bolts, nuts, and washers for all field connections in painted structures.

- Galvanizing must meet the requirements of Item 445, "Galvanizing". Fit-up bolts are not required to be galvanized. Do not provide galvanized A490 bolts for any structure.

- **CONSTRUCTION/FABRICATION NOTES:**
  - Provide complete joint penetration welds for all field connections in painted structures.
  - Erection Bolt holes may be standard or oversize, as the Contractor's option. Erection bolts do not need to be tightened beyond snug tight. Leave erection bolts in the finished structure.

- **MATERIAL NOTES:**
  - For painted bridges, provide A709 Gr 50, 50W, or 50W steel for diaphragms, cross-frames, plate stiffeners, or gusset plates unless noted otherwise on the span details. Minimum wall thickness for round HSS is 0.71. Provide A847 Round HSS for Split-Pipe Stiffeners unless noted otherwise on the span details. Minimum wall thickness for round HSS is 0.71. Provide galvanized A325 Erection Bolts with two F436 hardened washers and one A563 Gr C3 or DOT Heavy Hex nut each. Provide galvanized bolts, nuts, and washers for all field connections in painted structures.

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