Specifications & Codes: NCDOT Standard Specifications/AASHTO/AWS D1.5, Section 2, 5 and 12

Material Specifications: ASTM A-36, 3/8" THICK


Filler Metal Specification: AWS A5.1 Classification: E-7018

Manufacturer: NCDOT Approved Single or Multiple Pass both Weld Position of Weld: Vertical

Welding Current: DC Polarity: Positive Progression: Vertical - up

Root Treatment: N/A

Preheat Temp: 50° minimum Interpass: 450° maximum Post Heat: N/A

<table>
<thead>
<tr>
<th>Pass Num.</th>
<th>Electrode Size</th>
<th>Welding Current Amperes</th>
<th>Travel Speed</th>
<th>Joint Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1/8&quot;</td>
<td>90-150</td>
<td>20-23</td>
<td>6-9 ipm</td>
</tr>
</tbody>
</table>

**PREHEAT**

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Min Temp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 3/4”</td>
<td>50°</td>
</tr>
</tbody>
</table>

**COMMENTS:**

Remove all rust and mill scale within one inch of the area to be welded prior to fit-up. Remove all slag and spatter between passes. Clean the completed weld of all debris, slag and spatter.

The fillet weld size shall be as directed by the examination proctor.

WPS Description Fillet Weld Certification Test
Written By: Randy Dempsey, CWI/CWE, Transportation Technician IV
Signature: 

WPS #: 040209008

Authorized By: Steve Walton, Metals Engineer
Signature: 

Revision #: 3
FIT-UP WELDED
JPS FILLET JELD CERTIFICATION TEST 040209008 R3
prerequisite for groove test
JOINT DETAIL ATTACHMENT

FIT-UP

WELDED

4"

6"

4"

90°

FILLET WELD
TEE JOINT DETAILS

Weld Symbol definitions per AWS A2.4:2007

FILLET WELD, BOTH SIDES OF ARROW
Illustrations for Fillet Weld Certification
(prerequisite for Bridge Welder and Pipe Welder Certification).

Coupon Fit-up.

Completed weld.

NCDOT MATERIALS & TESTS UNIT (STEEL SECTION)