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


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

Manufacturer: NCDOT Approved Single or Multiple Pass single Position of Weld Flat, Horizontal

Welding Current: DC Polarity: Positive Progression: N/A

Root Treatment: N/A

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

Pass Num. Electrode Size Welding Current Travel Speed Joint Details
All 1/8” 90-150 20-23 6-9 ipm SEE ATTACHMENT

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>
<tr>
<td>Over 3/4” to 1 1/2”</td>
<td>70°</td>
</tr>
<tr>
<td>Over 1 1/2” to 2 1/2”</td>
<td>150°</td>
</tr>
<tr>
<td>Over 2 1/2”</td>
<td>225°</td>
</tr>
</tbody>
</table>

WPS Description: Concrete Girder SIP Angle Written By: Randy Dempsey, CWI/CWE, TT IV

WPS #: 011609006 Authorized By: Steve Walton, Metals Engineer

Revision #: 4 Signature:

NCDOT MATERIALS & TESTS UNIT (STEEL SECTION)
CONCRETE GIRDER SIP ANGLE DETAILS

Weld Symbol definitions per AWS A2.4:2007
Illustrations for welding SIP angle to the embed steel on pre-stressed concrete girders.

Unacceptable weld (inadequate length)

Acceptable weld (slag should be removed)

NCDOT MATERIALS & TESTS UNIT (STEEL SECTION)