NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
OVERHANG BRACKET
WELDING PROCEDURE SPECIFICATION (WPS) AWS D1.5

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 Electrodes Single or Multiple Pass single Position of Weld Flat, Horizontal
Welding Current: DC Polarity: Positive Progression: N/A
Root Treatment: N/A
Preheat Temp: 100° minimum Interpass: 450° maximum Post Heat: N/A

<table>
<thead>
<tr>
<th>Pass Num.</th>
<th>Electrode Size</th>
<th>Welding Current</th>
<th>Travel Speed</th>
<th>Joint Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1/8”</td>
<td>90-140 120-200</td>
<td>20-23 21-24</td>
<td>6-9 ipm 6-10 ipm</td>
</tr>
<tr>
<td>All</td>
<td>5/32”</td>
<td></td>
<td></td>
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</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>100°</td>
</tr>
<tr>
<td>Over 3/4” to 1 1/2”</td>
<td>100°</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>

COMMENTS:
Remove all coating, rust, dirt and mill scale within one inch of the area to be welded prior to fit-up. Repair all weld discontinuities. Clean the completed weld of all debris, slag and spatter.

NO WELDING IS ALLOWED IN THE TENSION AREA OF THE FLANGE!!!

Written By: Randy Dempsey, CWI/CWE, TT IV
Signature:

Authorized By: Steve Walton, Metals Engineer
Signature:

NCDOT MATERIALS & TESTS UNIT (STEEL SECTION)
OVERHANG BRACKET DETAILS

Weld Symbol definitions per AWS A2.4:2007

FIELD WELD SYMBOL

Double-Flare Bevel-Groove with Weld Length
Illustration for welding overhang brackets to steel girders.

Acceptable weld

No weld allowed in tension areas

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