

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

6G PIPE CERTIFICATION TEST (PIPE WELDER)

WELDING PROCEDURE SPECIFICATION (WPS) AWS D1.1

Specifications & Codes: NCDOT Standard Specifications/AASHTO/AWS D1.1, Sections 2 thru 6

Material Specifications: ASTM A-36

Welding Process: SMAW Manual or Semi- Automatic or Automatic: Manual

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

Manufacturer: NCDOT Approved Electrodes Single or Multiple Pass Multiple Position of Weld Flat, Horizontal Vertical, Overhead

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

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
		Amperes	Volts			
All	1/8"	90-150	20-23	6-9 ipm		SEE ATTACHMENT

PREHEAT	
Thickness	Min. Temp.
Up to 3/4"	50°

COMMENTS:
The backing ring must be in close contact with the test material.

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.

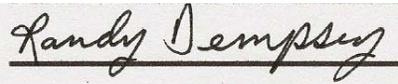
Fill the groove to the full cross section of the member.

WPS Description: 6G Pipe Certification Test

WPS #: 040209010

Revision #: 3

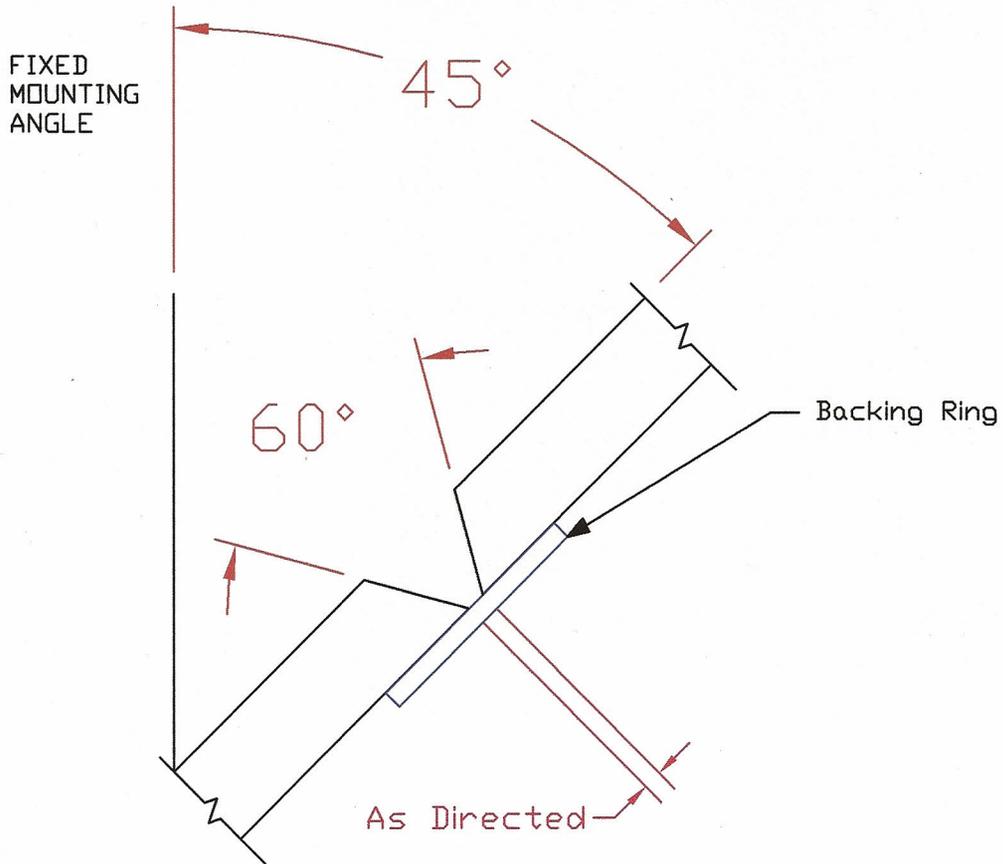
Written By: Randy Dempsey, CWI/CWE, TT IV

Signature: 

Steve Walton, Metals Engineer

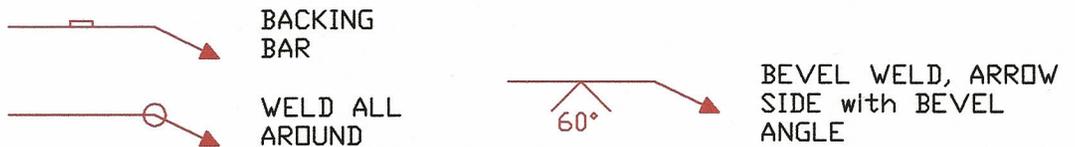
Authorized By: 

WPS 6G PIPE CERTIFICATION TEST 040209010
R3 JOINT DETAIL ATTACHMENT



6G PIPE JOINT DETAILS

Weld Symbol definitions per AWS A2.4:2007



Illustrations 6G Pipe Certification Test.



Coupon fit-up (place the splice in backing ring at the top).



Completed coupon.

NCDOT MATERIALS & TESTS UNIT (STEEL SECTION)