

Contractor/Organization: STRUCTAL, Div. Canam
Welding process(es): FCAW
Type: Semi Auto or Auto

JOINT DESIGN USED

Backing: N/A Mat'l: N/A
Root Opening: N/A Rf Dim.: N/A
Groove Angle: N/A Radius (J, U): N/A
Backgouging: N/A Method: N/A
Root Treatment: Grind or Blast to Bare Metal

BASE METALS

Material Spec: A709 Type or Grade: Gr.36, 50,
50W
Size of Groove: N/A Size of fillet: 5/16"

FILLER METALS

AWS Spec.: A5.20 AWS Class.: 81T1-Ni1C H8
Manufacturer Trade Name: ESAB 810X-Ni1

SHIELDING

Flux: N/A Mfg Trade Name: N/A
Dew Point: -40° F Cup size: N/A
Gas composition: 100% CO₂ Flow Rate: 40 CFH minimum

POSTWELD HEAT TREATMENT

Temperature: N/A Holding Time: N/A
Heating/Cooling rate: N/A

HEAT INPUT

Min. Heat Input: 26.4 kJ/in Max. Heat input: 45.9 kJ/in

WPS : FC-1001

Revision: 0 Date: 06/25/2012 By: Tyler Gaunt

Authorized by: *Tyler Gaunt* Date: 06/25/2012

Supporting PQR: PQR-FC-50W-50W-3G-WM23

POSITION

Position of Groove: N/A Fillet: 3F
Vertical progression : Vertical UP

ELECTRICAL CHARACTERISTICS

Transfer mode: N/A Current: DCEP
ESO: 3/4" +/- 1/4" Other: N/A

TECHNIQUE

Stringer or Weave Bead: STRINGER
Single or multiple pass: Single
Nb of Electrodes: 1
Electrode spacing :
Longitudinal: N/A, Lateral: N/A, Angle: varies
Interpass Cleaning: REMOVE ALL CONTAMINANTS

PREHEAT – Maximum interpass : N/A

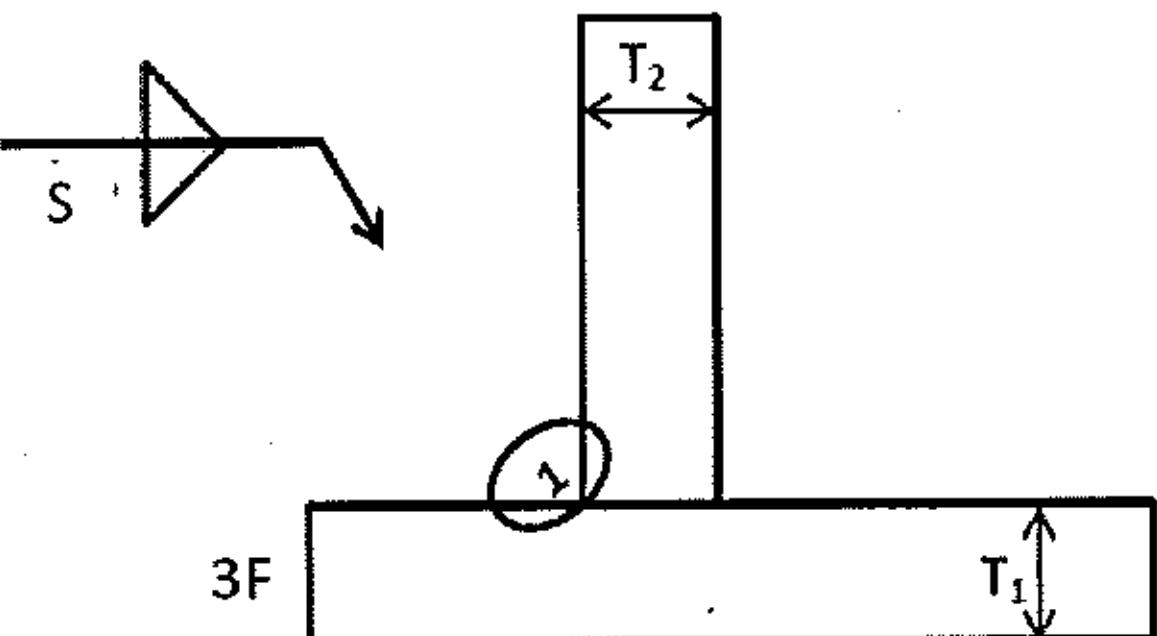
MINIMUM PREHEAT & INTERPASS TEMPERATURE

Thickness of thickest part at point of welding	FCM Application	Non FCM Application
$t \leq \frac{3}{4}$ (in.)	150 °F	50 °F
$\frac{3}{4} < t \leq 1\frac{1}{2}$ (in.)	250 °F	70 °F
$1\frac{1}{2} < t \leq 2\frac{1}{2}$ (in.)	325 °F	150 °F
$2\frac{1}{2} > t$ (in.)	350 °F	225 °F

Note1: For Fillet Welding on Secondary members

Note2: For Stiffener to Flange fillet welds on Main Members

Note3: For Fillet Welding of Drip Bars

(S)	PASS	ELECT. SIZE	WELDING CURRENT		TRAVEL SPEED (IN/MIN)	JOINT DETAIL
			AMPS	VOLTS		
5/16"	1	1/16"	200-239	24-25	5 - 7	
1/4"	1	1/16"	200-239	24-25	5-7	

THIS PROCEDURE MAY VARY DUE TO FABRICATION SEQUENCE, FIT-UP, PASS SIZE, ETC. WITHIN THE LIMITATION OF
VARIABLES GIVEN IN SECTION 5 OF AWS D1.5:2010.

CK'D _____
VTrans
Received *JW*
OK'D BY _____

JUL 11 2012