

Casco Bay Steel Structures, Inc.

WELDING PROCEDURE SPECIFICATION

Material specification ASTM Gr 50 + 50W
 Welding process Submerged ARC welding
 Manual or machine Machine
 Position of welding Flat + Horizontal
 Filler metal specification AWS A5-23
 Filler metal classification F8A2-ENIK-Ni1-118
 Flux LINCOLN 960-Elec LA-75
 Shielding gas NA Flow rate NA
 Single or multiple pass Single + Multiple
 Single or multiple arc Single
 Welding current DC
 Polarity DC EP
 Welding progression See Detail
 Root treatment Grind-wire Brush-Area Free of Slag-RUST & Moisture
 Preheat and interpass temperature See Table
 Postheat temperature NA
 Heat Input Min 51.3 kJ/in Max 73.4 kJ/in PQR-1 = 64.1 kJ/in

Vermont Agency of Transportation

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CK'D BY JWC OK'D BY

November 4, 2013

RESUBMIT No **Approved**
 BY James Lacroix DATE 11/08/2013

VT-ACT, Bristol
 Bridge No. 31
 Proj. No. BRD 1445(32)
 C.B.S.S. NO. 534

Minimum Preheat and Interpass Temperature, °C (°F)

Welding Process (Base Metal)	Thickness of Thickest Part at Point of Welding, mm (in)			
	To 20 mm (3/4 in) Incl.	Over 20 mm (3/4 in) to 40 mm (1-1/2 in) Incl.	Over 40 mm (1-1/2 in) to 65 mm (2-1/2 in) Incl.	Over 65 mm (2-1/2 in)
SAW; OMAW; FCAW; SMAW (M270M (M270) (A 709M (A 709)) Cr. 250 (36), 345 (50), 345W (50W), HPS 345W (HPS 30W))	10 (50)	20 (70)	65 (150)	110 (225)
SAW; OMAW; FCAW; SMAW (M270M (M270) (A 709M (A 709)) Cr. HPS 485W (HPS 70W), 690 (100), 690W (100W))	10 (50)	50 (125)	80 (175)	110 (225)

WELDING PROCEDURE

Max Interpass - 430°F

Pass no.	Electrode size	Welding current		Travel speed	Notes
		Amperes	Volts		
5 32	5/32	620	31	18 IPM	See 5.13 AWS D1-5 Joint detail RL 2c-5 Backgauge
		570	29	15	
		To 650	To 33	To 20	

T	P	R
1/2 to 1"	3/4 MIN	0
1" to 1 1/2"	3/8 MIN	0
1 1/2" to 2"	1/2 MIN	0

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in applicable A.W.S. codes or contract specifications

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Revision no. _____

Contractor Casco Bay Steel
 Authorized By Paul E. [Signature]
 Date April 13-2012