

# Casco Bay Steel Structures, Inc.

## WELDING PROCEDURE SPECIFICATION

Material specification ASTM - Gr 50 - 50W NOTE - 1  
 Welding process Submerged ARC welding  
 Manual or machine Machine  
 Position of welding Flat - Horizontal  
 Filler metal specification AWS A5-23  
 Filler metal classification E802-ENiK-Ni1-H8  
 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 DCEN  
 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 40.9 KJ/in Max 64.2 KJ/in P.Q.R # 2-58.4 KJ/in

Vermont Agency of Transportation  
**RECEIVED**

CK'D BY JWC OK'D BY \_\_\_\_\_  
 November 4, 2013

Welding Process (Base Metal)	Minimum Preheat and Interpass Temperature, °C (°F)			
	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; GMAW; FCAW; SMAW (M270M [M270] [A 709M (A 709)] Gr. 250 [35], 345 [50], 345W [50W], HPS 345W [HPS 50W])	10 [50]	20 [70]	65 [150]	110 [225]
SAW; GMAW; FCAW; SMAW (M270M [M270] [A 709M (A 709)] Gr. HPS 485W [HPS 70W], 690 [100], 690W [100W])	10 [50]	50 [125]	80 [175]	110 [225]

RESUBMIT No BY James Lacroix Approved DATE 11/08/2013  
VT-AOT, Bristol  
Bridge No. 31  
Proj No. BRD 1445 (32)  
C.B.S.S. NO. 534

### WELDING PROCEDURE

Max. Interpass = 450°

Pass no.	Electrode size	Welding current		Travel speed
		Amperes	Volts	
		365	32	12 IPM
	3/32	320	30	11
		70	70	70
		350	33	14

Sec 5-13  
 AWS D1-5 Joint detail Fillet

NOTE - 1  
 use for welding Gr 50W to G40HP50

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

Procedure no 250 ST of VT  
 Revision no \_\_\_\_\_

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