

# Casco Bay Steel Structures, Inc.

## WELDING PROCEDURE SPECIFICATION

Material specification ASTM Gr 50-50W  
 Welding process Shielded Metal ARC  
 Manual or machine Manual  
 Position of welding Flat, Horizontal  
 Filler metal specification ANSI/AWS A5.1-A5-5  
 Filler metal classification E7018 - E8018 C/C3  
 Flux NA  
 Shielding gas NA Flow rate NA  
 Single or multiple pass single & multiple  
 Single or multiple arc single  
 Welding current AC/DC  
 Polarity STRAIGHT & Reverse  
 Welding progression See Detail  
 Root treatment Grind - Wire brush - Area Free of Slag - RUST - Moisture  
 Preheat and interpass temperature  
 Postheat temperature NA  
 Heat Input Min NA Max NA

CK'D VTans  
 Received JWC  
 OK'd BY

APR 05 2013

Resubmit BY APPROVED  
 DATE 4/5/13

### 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; GMAW; FCAW; SMAW (M270M [M270] [A 709M (A 709)] Gr. 250 [36], 345 [50], 345W [50W], HPS 345W [HPS 30W])	10 [50]	20 [70]	65 [150]	110 [225]

Vermont AOT  
 Cambridge B# 21  
 Proj NO. BRB-027-1(4)  
 CBS5-524

### WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	AWS D1.5 Joint detail
		Amperes	Volts		
AS Req	7018				Joint detail Fillet
	1/8	70 TO 170	22-26		2F
	5/32	120 TO 225	22-26		
	3/16	110 TO 300	24-27		3/16 TO 5/16
	8018				1F
	1/8	90 TO 160	27-26		
	5/32	120 TO 225	22-26		3/16 TO 3/8
	3/16	180 TO 290	24-27		

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. 401

Revision

Contractor Casco Bay Steel  
 Approved By [Signature]  
 Date 4/5/13