

# Casco Bay Steel Structures, Inc. 68-STRUCTURAL STEEL

## WELDING PROCEDURE SPECIFICATION

Material specification ASTM A 709 - Gr 36-50-50W  
 Welding process Submerged Arc Welding  
 Manual or machine Machine  
 Position of welding Flat + Horizontal  
 Filler metal specification A5-23  
 Filler metal classification E8A2-ENIK-Ni1-H8  
 Flux Lincoln 960 - Electrode EA-25  
 Shielding gas NA Flow rate NA  
 Single or multiple pass Both  
 Single or multiple arc Single  
 Welding current DC  
 Polarity DC E P  
 Welding progression See Detail  
 Root treatment grind-wire brush - Free of Mill scale, Slag-Rust & Moisture  
 Preheat and interpass temperature See Table  
 Postheat temperature As Req  
 Heat Input Min 39.8 Max 62.5 FCM 14-56.8 kJ/in

KIRANS  
RECEIVED

CK'D BY \_\_\_\_\_ OK'D BY JWC  
 APR 22 2010  
 RESUBMIT \_\_\_\_\_ APPROVED   
 BY \_\_\_\_\_ DATE 05/04/10

### 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)] Or. 250 [36], 345 [50], 345W [50W], HPS 345W [HPS 30W])	10 [50]	20 [70]	65 [150]	110 [225]
SAW; GMAW; FCAW; SMAW (M270M [M270] [A 709M (A 709)] Or. HPS 485W [HPS 70W], 690 [100], 690W [100W])	10 [50]	50 [125]	80 [175]	110 [225]

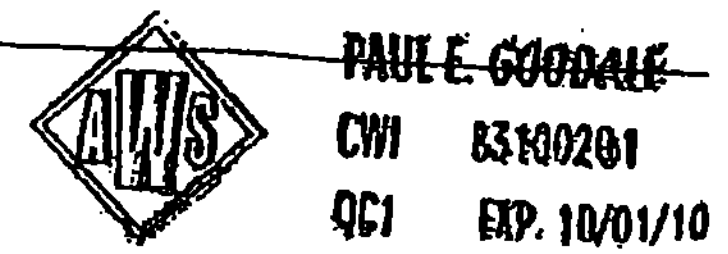
VT-AOT - Read Board  
 Br. No. 31  
 Proj No - BRD-1441(25)  
 CBSS 445

### WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Sec. 5-13 AWS D1-5 Joint detail B-L2C-5
		Amperes	Volts		
AS REQ	5/32	600	30	19	
		640	32	21	
		70	70	20	
		560	28	17	T1 1/4 TO 1" 1/4 MIN over 1" TO 1 1/2 3/8 MIN over 2" TO 2 1/2 1/2 MIN

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. 202-A  
Revision no. \_\_\_\_\_



Contractor Casco Bay Steel  
 Authorized By Paul E. Goodale  
 Date 1-11-10