

# Casco Bay Steel Structures, Inc.

## WELDING PROCEDURE SPECIFICATION

Material specification: ASTM - Gr 50-50W  
 Welding process: Submerged Arc welding Power source  
 Manual or machine: Machine  
 Position of welding: Flat + Horizontal  
 Filler metal specification: A5-23  
 Filler metal classification: E802-E711-Ni-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: Alternating  
 Polarity: AC  
 Welding progression: See Details  
 Root treatment: Grind - wire brush - Area Free of Slag - RUST - Moisture  
 Preheat and interpass temperature: See Table  
 Postheat temperature: NA  
 Heat Input: Min 47.1 KJ/in Max 74.0 KJ/in PQR - PWT - 67.3 KJ/in

Vermont Agency of Transportation

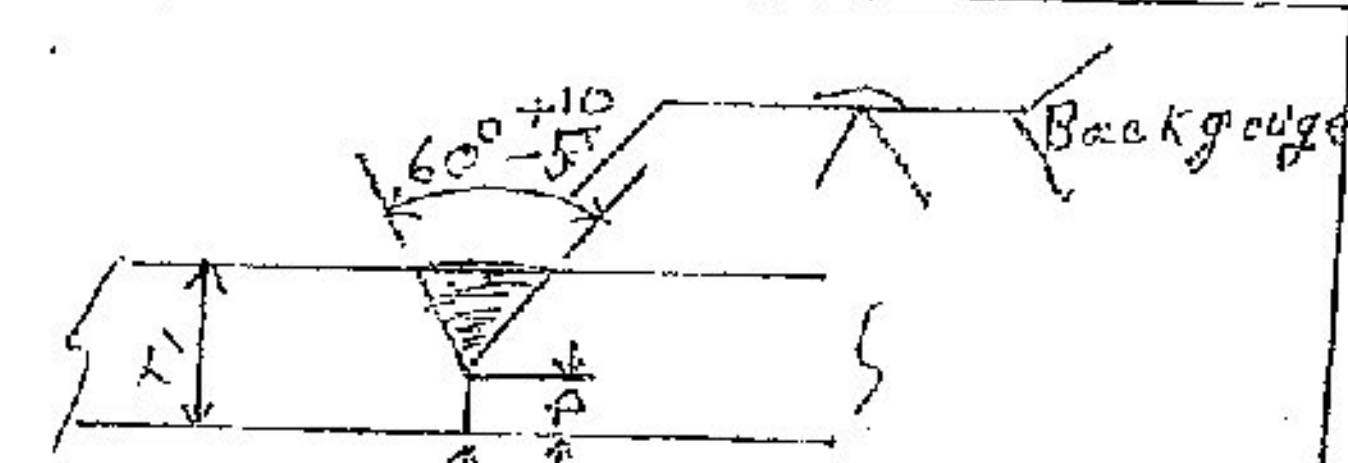
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Minimum Preheat and Interpass Temperature, °C [°F]

Welding Process (Base Metal)	Thickness of Thickest Part at Point of Welding, mm [in]	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.
SAW; GMAW; FCAW; SMAW (M270M [M270] [A 709M (A 709)] Or. 250 [36], 345 [50], 345W [50W], HPS 345W [HPS 30W])	To 20 mm [3/4 in] Incl.	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])	To 20 mm [3/4 in] Incl.	50 [125]	80 [175]	110 [225]

CK'D BY JWC OK'D BY  
 November 4, 2013  
 RESUBMIT No Approved  
 BY James Lacroix DATE 11/08/2013  
VT-AOT, Bristol  
Bridge No. 31  
Proj No. BRD 1445 (30)  
C.B.S.S. No. 534

WELDING PROCEDURE Max Int. Temp = 460°F

Pass no.	Electrode size	Welding current		Travel speed	Notes
		Amperes	Volts		
AS Req.	5/32	827	38	28 IPM	See 5.13 AWS D1-5 Joint detail BL2c-s 
		744	35	24	
		70	41	32	

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. PW202B ST. OF VT Contractor Casco Bay Steel  
 Revision no. \_\_\_\_\_ Authorized By Paul C. Woodale  
 Date April 13 2012