



**Casco Bay Steel Structures**  
 One Wallace Ave, South Portland ME 04106  
**AWS - Prequalified Welding Procedure Specification (pWPS)**  
 WeldOffice WPS

Company name	Casco Bay Steel Structures			Identification #	480	Rev. 1	4.14.17
Welding process	SMAW			Originated by	Matthew Cote		
Process type	Manual			Date	7/22/2014		
				Authorized by	Matthew J Cote		
				Date	7/22/2014		
<b>Joint design used</b>							
Joint type	T - T joint			<b>Position</b>			
Joint design	Fillet Weld			Welding position:	Groove		
Backing	No				Fillet	All	
Backing material	Not Applicable			Vertical progression	Up		
Root opening (R)*	(in.)			<b>Electrical characteristics</b>			
Root face (f)*	(in.)			Transfer mode (GMAW)	N/A		
Groove angle (a)*	(deg.)			Current type	Other		
Radius (J - U)*	(deg.)			Other	DC+ and AC		
Back gouging	No			<b>Technique</b>			
Back gouging method	None			Stringer or weave bead	Stringer or Weave		
<b>Base metals</b> * Datum, As Detailed (As Fil-Up)							
Spec. type or grade	Gr 50/ Gr50W			Multi/single pass (per side)	Single or Multiple		
Thickness:	Groove (in.)			Number of electrodes	Varies		
	Fillet (in.)	1/8" and above		Spacing:	Longitudinal (in.)		
Diameter (Pipe)	(in.)				Lateral (in.)		
					Angle (deg.)		
<b>Filler metals</b>							
AWS Specification	A5.5			Contact tube to work	(in.) -		
AWS Classification	E-8018 H4R			Peening	Not permitted		
<b>Shielding</b>							
Flux	-			Interpass cleaning	Brushing or grinding		
Electrode-flux (class)	-			<b>Preheat</b>			
Gas composition	-			Preheat temp.:	Min. (°F)	See notes	
Gas flow rate	(cfh)	-		Interpass temp.:	Min. (°F)	See notes	
Gas cup size	(in.)	-			Max. (°F)	450	
<b>Welding procedure</b>							

Layer	Pass	Process	Filler metal class	Filler metal diameter (in.)	Current type / polarity	Amps	Wire feed speed (in./min)	Volts	Travel speed (in./min)	Joint details
1	All	SMAW	E-8018 H4R	1/8	DCEP	100-160	-	n/a	varies	
1	All	SMAW	E-8018 H4R	1/8	AC	90-160	-	n/a	varies	
1	All	SMAW	E-8018 H4R	5/32	DCEP	140-210	-	n/a	varies	
1	All	SMAW	E-8018 H4R	5/32	AC	130-210	-	n/a	varies	
1	All	SMAW	E-8018 H4R	3/16	DCEP	200-300	-	n/a	varies	
1	All	SMAW	E-8018 H4R	3/16	AC	180-300	-	n/a	varies	

Designation: FILLET

**Notes**  
 LINCOLN ELECTRIC EXCALIBUR 8018-C3 MR  
 SEE BACKSIDE FOR MORE DETAILS

**Vermont Agency of Transportation**  
**RECEIVED**  
 CK'D BY \_\_\_\_\_ OK'D BY RSF  
 May 7, 2017  
 RESUBMIT No Approved  
 BY C. Carlson DATE 05/09/2017

Signature 1	Signature	Signature 2	Signature
Name	Matthew J Cote	Name	
Date	7/22/2014	Date	
Signature 3	Signature	Signature 4	Signature
Name		Name	
Date		Date	