



**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.	
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>		<b>Position</b>			
Joint type	T - T joint	Welding position:	Groove		
Joint design	Fillet Weld		Fillet	All	
Backing	No	Vertical progression		Up	
Backing material	Not Applicable	<b>Electrical characteristics</b>			
Root opening (R)* (in.)		Transfer mode (GMAW)	N/A		
Root face (f)* (in.)		Current type	Other		
Groove angle (a)* (deg.)		Other	DC+ and AC		
Radius (J - U)* (deg.)		<b>Technique</b>			
Back gouging	No	Stringer or weave bead	Stringer or Weave		
Back gouging method	None	Multi/single pass (per side)	Single or Multiple		
<b>Base metals</b> <small>* Datum, As Detailed (As Fit-Up)</small>		Number of electrodes	Varies		
Spec., type or grade	Gr 50/ Gr50W	Spacing: Longitudinal (in.)	-		
Thickness: Groove (in.)		Lateral (in.)	-		
Fillet (in.)	1/8" and above	Angle (deg.)	-		
Diameter (Pipe) (in.)		Contact tube to work (in.)	-		
<b>Filler metals</b>		Peening	Not permitted		
AWS Specification	A5.5	Interpass cleaning	Brushing or grinding		
AWS Classification	E-8018 H4R	<b>Preheat</b>			
<b>Shielding</b>		Preheat temp.: Min. (°F)	See notes		
Flux	-	Interpass temp.: Min. (°F)	See notes		
Electrode-flux (class)	-	Max. (°F)	450		
Gas composition	-	<b>Post weld heat treatment</b>			
Gas flow rate (cft)	-	Temperature (°F)	None		
Gas cup size (in.)	-	Time (hrs)	-		

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 RSF OK'D BY WDL  
 March 9, 2016  
 RESUBMIT No Approved  
 BY RSY DATE 05/26/2016

<b>Signature 1</b>		<b>Signature 2</b>	
Name	Signature	Name	Signature
Matthew J Cote			
Date		Date	
7/22/2014	Matthew J Cote CWI 08051341 OC1 EXP 5/1/2017		
<b>Signature 3</b>		<b>Signature 4</b>	
Name	Signature	Name	Signature
Date		Date	