



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

WPS record number	603	Revision	1	Qualified to	
Date	6/23/2015			Company name	
Supporting PQR(s)	613 FCM				
Reference docs.					

Scope	Fillet
Joint	Joint details for this welding procedure specification in: JOINTS section of this WPS

BASE METALS				THICKNESS RANGE QUALIFIED (in.)			
Type	Gr 50	P-no.	Grp-no.	As-welded		With PWHT	
Welded to	Gr 50	P-no.	Grp-no.	Min.	Max.	Min.	Max.
Backing:	NONE	P-no.	Grp-no.				
Retainers							
Notes							

Complete pen.	-	-	-	-
Impact tested	-	-	-	-
Partial pen.	-	-	-	-
Fillet welds	1/8	no max	-	-

DIAMETER RANGE QUALIFIED (in.)			
As-welded		With PWHT	
Min.	Max.	Min.	Max.
-	-	-	-

FILLER METALS						THICKNESS RANGE QUALIFIED (in.)			
SFA	Classification	F-no.	A-no.	Chemical analysis or Trade name	As-welded		With PWHT		
					Min.	Max.	Min.	Max.	
GMAW	E70C-6MH4	6		ESAB Core Weld C6	1/8	no max	-	-	
Sup. filler	-	-	-	-	- None -				

WELDING PROCEDURE		GMAW	
Welding process		Automatic / Semi-Automatic	
Type		SEE BACKPAGE	
Minimum preheat/interpass temperature (°F)		390 F	
Maximum interpass temperature (°F)		.052	
Filler metal size (in.)		F,H	
Layer number		Not applicable	
Position		DCEP (reverse polarity)	
Weld progression		296	
Current/polarity		29.1	
Amperes		13.1	
Volts		39.5	
Travel speed (in./min)		Spray	
Maximum heat input (kJ/in.)		Argon/CO2, 90/10	
Wire feed speed (in./min)		35	
Arc transfer mode		Stringer or Weave	
Shielding: Gas type		5/8	
Flow rate (cfh)		Single or Multiple passes	
Trailing: Gas type		Single electrode	
Flow rate (cfh)		E70C-6MH4	
Backing: Gas type			
Flow rate (cfh)			
String or weave			
Orifice/gas cup size			
C.T.W.D (in.)			
Multi/Single pass per side			
Multi/single electrode			
Maximum pass thickness (in.)			
Weld deposit chemistry			
Notes			

CK'D BY R. Foster OK'D BY R. Foster  
 March 8, 2017  
 RESUBMIT No Approved  
 BY Kristin Higgins DATE 3/10/2017

CBSS 696 RT 110 over 1st Branch White River  
 Br #9 Proj BHF 0169(9)  
 CBSS 697 RT 110 over South Washington Brook  
 Br #11 Proj BHF 169(10)  
 Chelsea, VT