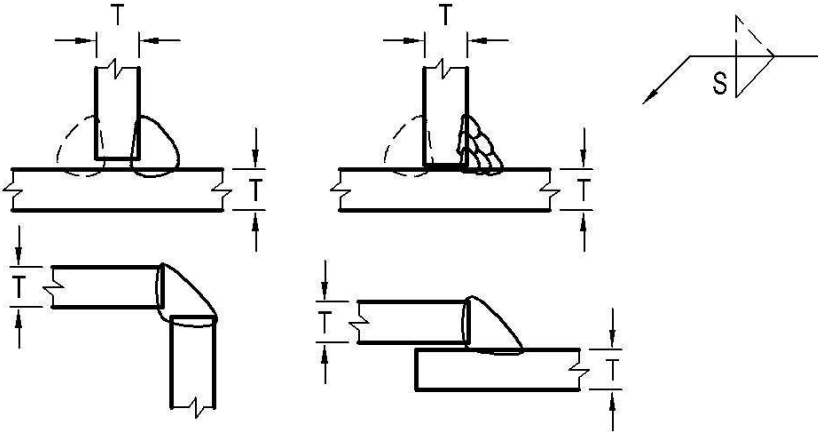


Prepared By: WeldCanada.com, Inc.		PREQUALIFIED WELDING PROCEDURE DATA SHEET		WPDS No.	DEMO-SMAW
				Ref. WPS	SMAW-CS
Company Name: <i>www.WeldCanada.com</i> Address: <i>info@WeldCanada.com, Toll Free: 1 (877) WPS-WELD</i>				Ref. Standards	CSA W47.1/ W59
Process	SMAW	Process Mode	Manual	Positions	Flat, Horizontal
Base Materials	Weathering Steels, 350A, 350AT, 400A, 400AT (50A, 50AT, 60A, 60AT), ASTM A 588 of Table 11.1/12.1-CSA W59				
Electrode (CSA W48)	E5518-C1				
AWS Classification	A5.5, E8018-C1				
Weld Type	Fillet Weld			Polarity	DCEP or AC
Cleaning Procedure	Chip, File, Brush and/ or Grind				
Interpass Temp., Max	N/A		Preheat/ Interpass Temp., Min	Up to 20 mm (3/4); 10 °C (50 °F); Table 5.3-CSA W59 for more	

Joint Configuration/ Joint Details:



Minimum Fillet Weld Size	
Table 4.4 of CSA W59	
Thickness	Weld Size, S
in	Single Pass
$T \leq \frac{1}{4}$	$\frac{1}{8}$ ($\frac{3}{16}$ *)
$T \leq \frac{1}{2}$	$\frac{3}{16}$
$T \leq \frac{3}{4}$	$\frac{1}{4}$
$T > \frac{3}{4}$	$\frac{5}{16}$

S shall not exceed the thickness of thinner part joined.

Maximum weld size (S) shall be (a) T for $T < \frac{1}{4}$ in, (b) $T - \frac{1}{16}$ in for $T \geq \frac{1}{4}$ in

* For cyclically loaded structure

Welding Parameters:

Weld Size (S) mm (in)	Side	Weld Layers	Pass Numbers	Filler Dia. mm (in)	Current Amps	Alternate Filler Size mm (in)	Current Amps
5 mm (3/16)	1 or 2	1	1	3.2 mm (1/8)	100-150	2.4 mm (3/32)	80-110
6 mm (1/4)		1	1				
8 mm (5/16)		1, 2	1-3 (2 Flat)			4.0 mm (5/32)	140-200
10 mm (3/8)		1, 2	1-3 (2 Flat)				
12 mm (1/2)		1-3	1-6 (4 Flat)			4.8 mm (3/16)	200-270
16 mm (5/8)		1-4	1-8 (6 Flat)				
>=20 mm (3/4)		1 to 5+	1-12 (9 Flat)				

Notes or Code's rules:

- Larger size electrodes may be used for fill and/ or cap passes of the thicker material.
- Smaller size electrodes usually applicable for root passes and/ or for thinner material.

John Smith, Welding Supervisor

CWB Acceptance

