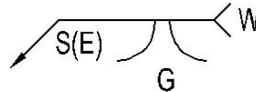
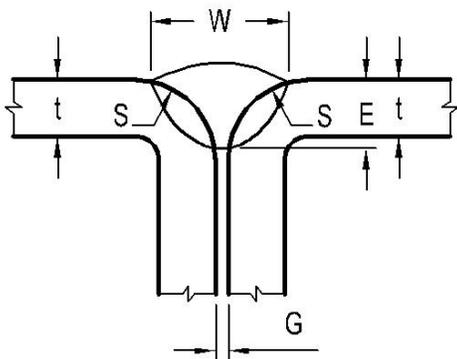


|   |  |  |  |   |                     |
|---|--|--|--|---|---------------------|
| Prepared By:<br>WeldCanada.com, Inc.  |  | <b>PREQUALIFIED WELDING PROCEDURE<br/>DATA SHEET</b> |  | WPDS No.  | DEMO-FCAW           |
|   |  |  |  | Ref. WPS  | FCAW-CS             |
| Company Name: <i>www.WeldCanada.com</i><br>Address: <i>info@WeldCanada.com, Toll Free: 1 (877) WPS-WELD</i> |  |  |  | Ref. Standards  | AWS D1.3/ CSA W47.1 |
| Process   | FCAW   | Process Mode   | Semi-Automatic                         | Positions   | F, H, V (up), OH    |
| Base Materials  | Steels in Groups I and II of Table 1.2 of AWS D1.3 |  |  |   |                     |
| Wire Class. (CSA W48)   | E491T-11-H8, E491T-11-H16 (FCAW-S)                 |  |  |   |                     |
| AWS Classification  | A5.20, E71T-11, E71T-11 H16 (FCAW-S)               |  |  |   |                     |
| Shielding Gas Flux (SAW)  | Self-Shielded (FCAW-S)                             |  |  | Flow Rate   | N/A                 |
|   |  |  |  | Nozzle Dia.   | 5/8 in              |
| Weld Type   | Partial Joint Penetration Groove Weld              |  |  | Current/ Polarity   | DCEN                |
| Electrical Stick Out<br>ESO (in)  | 1/2 to 3/4   |  | Preheat/<br>Interpass Temperature, Min | 0 °C (32°F), Clause 5.1-AWS D1.3<br>Surfaces free from moisture |                     |

Joint Configuration/ Joint Details:



$$W(\text{weld face width}) = 2 t (\text{min})$$

$$S = 2 t (\text{min})$$

$$E = t$$

| Thickness    | Root Opening (G) |
|--------------|------------------|
| 18 Ga. (min) | 0 (min)          |
| 11 Ga. (max) | t / 2 (max)      |

Figure 3.3 C

Welding Parameters:

| Thickness (T)<br>mm (in) | Weld Size<br>ETT (E)  | Side | Weld<br>Layers | Pass<br>Numbers | Filler Dia.<br>mm (in) | Current<br>Amps | Volts<br>V | Wire Feed Speed<br>(IPM) | Travel Speed<br>(IPM) |
|--------------------------|-----------------------|------|----------------|-----------------|------------------------|-----------------|------------|--------------------------|-----------------------|
| 18 Ga. to 12 Ga.         | As shown in<br>Sketch | 1    | 1 to 2         | 1 to 2          | 1.1/ 1.2 mm<br>(0.045) | 120             | 15         | 70                       | 10 to 25              |
|                          |                       |      |                |                 |                        | 140             | 16         | 90                       |                       |
|                          |                       |      |                |                 |                        | 160             | 17         | 110                      |                       |
|                          |                       |      |                |                 |                        | 170             | 18         | 130                      |                       |

Notes or Code's rules:

- Depending upon welding position, weld type, surface condition or other factors, voltage and/or wire feed speed may need to be adjusted.
- Thickness limited to less than 3 mm, as per CSA W47.1

**John Smith, Welding Engineer**

CWB Acceptance

