# WELDING PROCEDURE DATA SHEET (WPDS)

**RC Technical Services**
512 MacDougall Road
MacDougall Settlement, N.B.

| | |
|---|---|
| **WPDS No.:** | SMAW - SB1 |
| **Rev:** | 0 |
| **Date:** | July 09, 2019 |
| **Ref. WPS:** | SMAW-CS |
| **Ref. Standards:** | CSA W47.1, CSA W59 |
| **Prequalified joint no. / PQR no.:** | B-U4b |

**Base Metal:**

CSA W59, Table 11.1, GROUPS 1, 2, 3

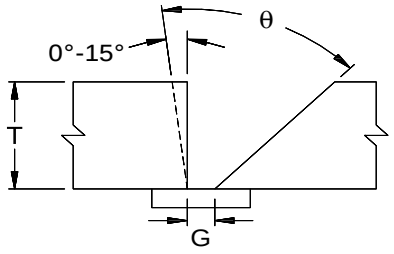
**Filler Metal / Classification**

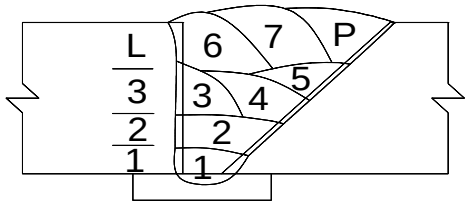
**CSA W48:** E4918-H8 or -H4, E4918-1-H8 or -H4,
**AWS A5.1:** E7018-H8 or -H4, E7018-1-H8 or -H4

**Thickness:** 3mm (1/8") to Unlimited

**Process:** **SMAW**

| | |
|---|---|
| **Shielding:** | N/A |
| **Gas Flow Rate:** | N/A |
| **Metal Transfer Mode:** | N/A |
| **Process Mode:** | MANUAL |
| **Position:** | SEE SKETCH |
| **Joint Type:** | BUTT |
| **Weld Type:** | Single Bevel Groove |
| **Penetration:** | COMPLETE |
| **Electrode Stickout:** | N/A |
| **Eff. Throat Thickness:** | ETT = T |
| **Preheating Temp.** | 10°C & Table 5.3 W59 |
| **Interpass Temp.:** | 260ºC (500ºF) MAX |
| **Backgouging Method:** | N/A |
| **Backgouging Depth:** | N/A |
| **Backing Material:** | See base metal above |
| **Backing Thickness:** | 6mm (1/4") Minimum |




Depth of prep. = T

See CSA W59, Table 10.1 for maximum criteria.

| θ | G | Positions |
|---|---|---|
| 20º | 12mm (1/2") | F, O only |
| 30º | 10mm (3/8") | F, O only |
| 45º | 6mm (1/4") | F, H, V-up, OH |

**Welding Parameters:**

| T Maximum mm | T Maximum in | Side | Layer | Pass | Electrode Diameter inch | Current Polarity | Amperes Min | Amperes Max | WFS inch / min. Min | WFS inch / min. Max | Volts Min | Volts Max | Arc Travel in/min Min | Arc Travel in/min Max |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UNLIMITED | | I | 1 - L | 1 - P | 1/8 | DCRP | 90 | 160 | | | | | | |
| UNLIMITED | | I | 1 - L | 1 - P | 5/32 | DCRP | 100 | 200 | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**Remarks:**

**CWB Approval:**

**Company's Approval:**

Questions or Tech. support? email: raycormier@rogers.com