Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification **A572 gr 50, A709 Gr 50, A36, A709 gr 36, A500 gr B**

Welding process **Gas Metal Arc Welding (GMAW) Spray Transfer**

Manual, semi-automatic, or automatic **Semi-Automatic**

Position of welding **Flat (1F) or Horizontal (2F)**

Filler metal specification **AWS A5.18**

Filler metal classification **ER70S-6**

Electrode and manufacturer **Lincoln Electric Lincoln Weld L-56**

Flux and manufacturer **N/A**

Shielding gas **86% Argon / 14% CO2** Flow rate **38 - 46 CFH**

Single or multiple pass **Single**

Single or multiple arc **Single**

Welding current **DCEP**

Polarity **Reverse - electrode positive**

Welding progression **Stringers**

Root treatment **clean base metal**

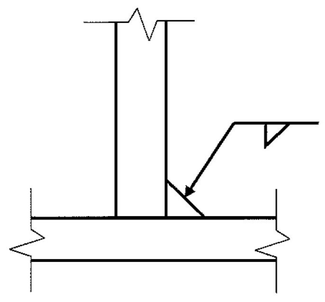
Preheat and interpass temperature **base metal up to 3/4" (50ºF) ; over 3/4 thru 1-1/2" (150ºF) : over 1-1/2" thru 2-1/2" (225ºF)**

Postweld heat treatment **None**

Electrode extension **3/4" ± 1/4"**

APPROVED
By Ryan S. Foster at 9:37 am, Mar 15, 2017

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters Amperes	Welding parameters Volts	Travel speed	Joint detail
3/16	1	1/16"	290 A to 330 A	29 V	19 - 21 ipm	TYPICAL ALL FILLET WELDS 
1/4	1	1/16"			17 - 19 ipm	
5/16	1	1/16"			16 - 18 ipm	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.5

WPS no. **W-1PFILLET-VT**

Revision no. **2**

Supporting PQR no. **HSCTGD15052416**

Fabricator **Highway Safety Corp**

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Date **02-23-17**

Project Name **Barton, Vermont**

Project Number **BHF 0286 (5)**