Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification: **A572 gr 50, A709 Gr 50**

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: **35-45 CFH**

Single or multiple pass: **Single or Multiple**

Single or multiple arc: **Single**

Welding current: **DCEP**

Polarity: **Reverse - electrode positive**

Welding progression: **Stringers**

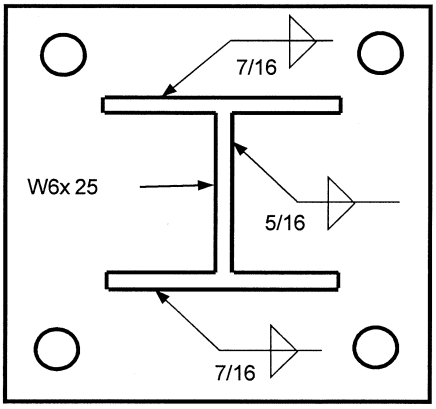
Root treatment: **clean base metal**

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

Postheat treatment: **None**

Electrode extension: **3/4" ± 1/4"**

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters Amperes	Welding parameters Volts	Travel speed	Joint detail
5/16"	**1**	**0.062"**	**300 A ± 30**	**29 V ± 2**	**15 ipm ± 2**	
7/16"	**1 & 2**	**0.062"**	↓	↓	**15 ipm ± 2**	

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-VTPEDPOST1**

Revision no. **0**

Supporting PQR no. **W-AWSD151 (06-22-11)**

Project Name **Waterbury, Vermont**

Fabricator **Highway Safety Corporation**

Prepared By: **Paul Radice**

Date **03/11/16**

Project Number **IM -089-2(43)**

Highway Safety Corporation

Glastonbury, CT

Welding Procedure Specification

Material specification **ASTM A500 gr B**

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

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 **35-45 CFH**

Single or multiple pass **Single**

Single or multiple arc **Single**

Welding current **DCEP**

Polarity **Reverse - electrode positive**

Welding progression **Stringers**

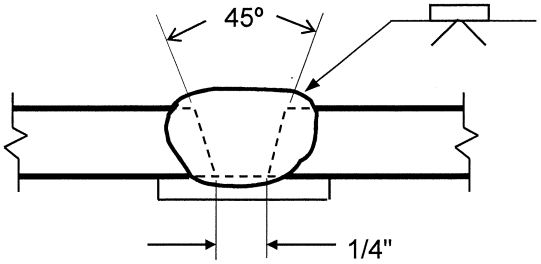
Root treatment **clean base metal**

Preheat and interpass temperature **base metal up to 3/4" (50°F)**

Postheat treatment **None**

Electrode extension **3/4" ± 1/4"**

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
	1	**0.063"**	**300 A ± 30**	**29 V ± 2**	**15 ipm ± 2**	B-U2a-GF 

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 D1.1

WPS no. **W-VGwBCK**

Revision no. **0**

Supporting PQR no. **Pre-Qualified**

Project Name **Waterbury, Vermont**

Fabricator **Highway Safety Corporation**

Prepared By: **Paul Radice**

Date **03/11/16**

Project Number **IM -089-2(43)**