

**Highway Safety Corporation**

Glastonbury, CT

**Welding Procedure Specification**

Material specification: A572 gr 50, A709 Gr 50  
 Welding process: Gas Metal Arc Welding (GMAW)  
 Manual, semi-automatic, or automatic: Semi-Automatic  
 Position of welding: Flat (F) or Horizontal (2F)  
 Filler metal specification: AWS A5.18  
 Filler metal classification: ER70S-3  
 Electrode and manufacturer: Lincoln Electric Lincoln Weld L-50  
 Flux and manufacturer: N/A  
 Shielding gas: 85% Argon / 15% CO2  
 Flow rate: 19-27 L / min  
 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	Travel speed	Joint detail
5/16"	1	0.062"	275 A 25 V	8-10 ipm	
7/16"	1 & 2	0.062"	± 25 ± 2	8-10 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-1791A**  
 Fabricator: **Highway Safety Corporation**  
 Revision no: **0**  
 Supporting POR no: **Pre-Qualified**  
 Project Name: **Hartford (Wilden) Vermont**  
 Date: **12/14/10**  
 Project Number: **STP 1444 (35)**  
 Prepared By: **Paul Radice**

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 VTRAWS  
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