

# 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 (1F) 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 Nohe  
 Electrode extension 3/4" ± 1/4"

### WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
5/16"	1	0.062"	275 A ± 25	25 V ± 2	8-10 ipm	
7/16"	1 & 2	0.062"	↓	↓	8-10 ipm	

TRANS RECEIVED  
 CK'D BY \_\_\_\_\_ CK'D BY JUL  
 MAY 07 2010  
 RESUBMIT \_\_\_\_\_ APPROVED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE 5/10/10

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-1744-A  
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 Project Name Moretown - Middlesex, VT

Fabricator Highway Safety Corporation  
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 Project Number BRS 0284(14)

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