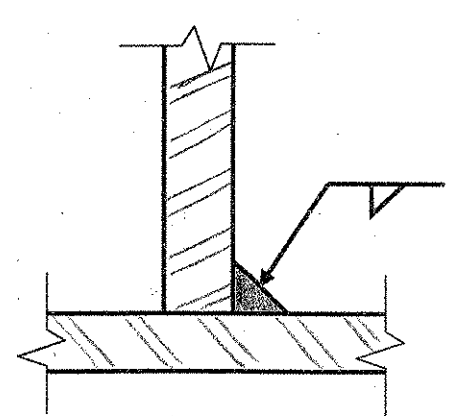


**Highway Safety Corporation**  
Glastonbury, CT  
**Welding Procedure Specification**

Material specification ASTM A36, A572 gr 50, A709 Gr 36, ASTM A709 Gr 50, A500 gr B  
Welding process Gas Metal Arc Welding (GMAW)  
Manual, semi-automatic, or automatic Semi-Automatic  
Position of welding 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  
Single or multiple arc Single  
Welding current DC  
Polarity Reverse  
Welding progression Stringers  
Root treatment None  
Preheat and interpass temperature Base Metal up to 3/4" (50°F); over 3/4-1 1/2" (70°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		
3/16"	1	0.045"	300 A	29 V	28 ipm ± 2	 <p>TYPICAL ALL FILLET WELDS</p>
			± 30	± 2		
1/4"	1	0.045"	300 A	29 V	14 ipm ± 2	
			± 30	± 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 D1.1

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