

# 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 38 - 46 CFH

Single or multiple pass Single or Multiple

Single or multiple arc Single

Welding current DCEP

Polarity Reverse - electrode positive

Welding progression Stringers

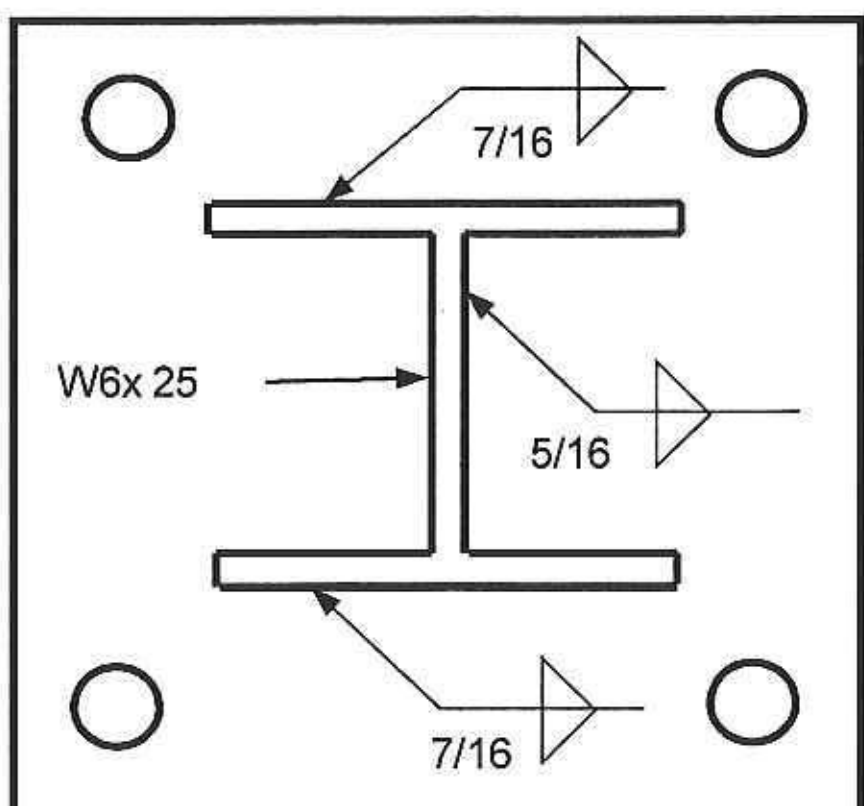

Root treatment clean base metal

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)

Postweld heat treatment None

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	1/16"	310 A ± 30	29 V ± 1	17 - 19 ipm	
7/16"	1 & 2	1/16"	↓	↓	↓	
<div style="border: 1px solid red; padding: 5px; width: fit-content; margin: auto;"> <p style="text-align: center; margin: 0;"><b>SHOP DRAWING REVIEW</b></p> <p style="font-size: 8px; margin: 2px 0;"> <input checked="" type="checkbox"/> REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.                 </p> <p style="font-size: 8px; margin: 2px 0;"> <input type="checkbox"/> REJECTED    <input type="checkbox"/> REVISE AND RESUBMIT    <input type="checkbox"/> APPROVED AS NOTED                 </p> <p style="font-size: 8px; margin: 2px 0;">                     CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DID NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING THEIR WORK WITH THAT OF ALL OTHER TRADES; AND PERFORMING THEIR WORK IN A SAFE AND SATISFACTORY MANNER.                 </p> <div style="display: flex; justify-content: space-between; font-size: 8px;"> <div style="width: 40%;">  <p>CLD Consulting Engineers 540 Commercial Street Manchester, NH 03101 603-888-5523</p> </div> <div style="width: 40%;"> <p>Job Number: 15-0223 Reviewed by: NDC Date: 1/3/2017</p> </div> </div> </div>						

RECEIVED

CK'D BY CLD&RF    OK'D BY TAS  
 December 29, 2016  
 RESUBMIT No    Approved  
 BY T Sumner    DATE 01/03/2016

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. <u><b>W-VTPEDPOST1</b></u> Revision no. <u><b>2</b></u> Supporting PQR no. <u><b>HSCTGD15052416</b></u> Project Name <u><b>Ludlow, VT</b></u>	Fabricator <u><b>Highway Safety Corp</b></u> Prepared By: <u><b>Paul Radice</b></u> Date <u><b>12/21/16</b></u> Project Number <u><b>STP DECK (39)</b></u>
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AWS  
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 CWI 98070221  
 QC1 EXP. 7/1/2019