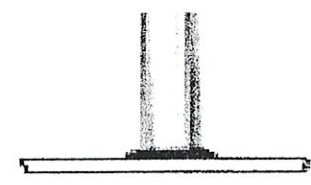




WELD PROCEDURE SPECIFICATION

MATERIAL SPECIFICATION: ASTM A108 anchor stud to a horizontal (planar) Carbon Steel surface
 WELDING PROCESS: Automatic timed stud weld
 MANUAL OR MACHINE: Machine (hand held stud gun)
 POSITION OF WELDING: Down hand (Flat)
 STUD METAL SPECIFICATION: ASTM A-108
 STUD METAL CLASSIFICATION: Type A or B
 STUD MANUFACTURE: Tri-Weld
 SHIELDING GAS: N/A DEW POINT: _____ FLOW RATE: _____
 FERRULE OR FLUX DESCRIPTION: Ceramic part #F 009-694
 SINGLE OR MULTIPLE ARC: Single ELECTRODE STICKOUT: N/A
 WELDING CURRENT: DC
 POLARITY: Straight
 ROOT TREATMENT: Clean of oil, dirt, rust, rust pits, moisture and scale
 PREHEAT AND INTERPASS TEMP. 40F min
 POSTHEAT TREATMENT: None
 WELDING MACHINE: Pro-Weld model ARC 1800
 STUD WELDING GUN: Nelson model # 751-347-000 1800amp

WELDING PROCEDURE

| Stud Diameter | Weld Current (Amps) | Lift & Plunge | | Weld Time (sec.) | Joint Detail (Stud weld) |
|---------------|---------------------|---------------|--------|------------------|---|
| | | Lift | Plunge | | |
| 1/2" | 1600 ± 5% | .093" | .187" | .700 ± 5% |  |

THIS PROCEDURE MAY VARY DUE TO THE FABRICATION SEQUENCE, FIT-UP, ETC., WITHIN THE LIMITATIONS OF VARIABLES GIVEN IN SECTION 7 OF AWS D1.5 BRIDGE WELDING CODE.

THIS PROCEDURE IS CONSIDERED PREQUALIFIED IN ACCORDANCE WITH AWS D1.5 SECTION 7.6.1 AND IS PERFORMED WITHIN THE STUD MANUFACTURES RECOMMENDATIONS.

PROCEDURE NO: Carbon Stud weld MANUFACTURER: Niagara Bridge and Rail

REVISION NO: 0 AUTHORIZED BY: [Signature]

DATE BY: 5/14/08 JUC

DATE BY: 5/14/08

DATE BY: 5/14/08