

# Casco Bay Steel Structures, Inc.

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III STRUCTURAL  
STEEL

## WELDING PROCEDURE SPECIFICATION

Material specification ASTM A109-Gr 36-50-50W (250-345-345W)  
 Welding process Shielded Metal Arc Welding (SMAW)  
 Manual or machine Manual  
 Position of welding FLAT (1F), Horizontal (2F)  
 Filler metal specification ANSI/AWS A5.1 - A5.5  
 Filler metal classification E7018 - 8018 1/32 - 7028  
 Flux NA  
 Shielding gas NA Flow rate NA  
 Single or multiple pass Single and multiple  
 Single or multiple arc single  
 Welding current AC/DC  
 Polarity STRAIGHT / Reverse  
 Welding progression \_\_\_\_\_  
 Root treatment MEET AWS SPECIFICATION  
 Preheat and interpass temperature To 3/4(9) 50°(10°) 3/4(9) TO 1 1/2(38) 70°(20°) 1 1/2(38) TO 2 1/2(63.5) 150°(65°) over 2 1/2(63.5) 225°(110°)  
 Postheat temperature NA  
 Heat Input Min NA Max NA

VT TRANS RECEIVED

OK'D BY JWC

DEC 07 2010

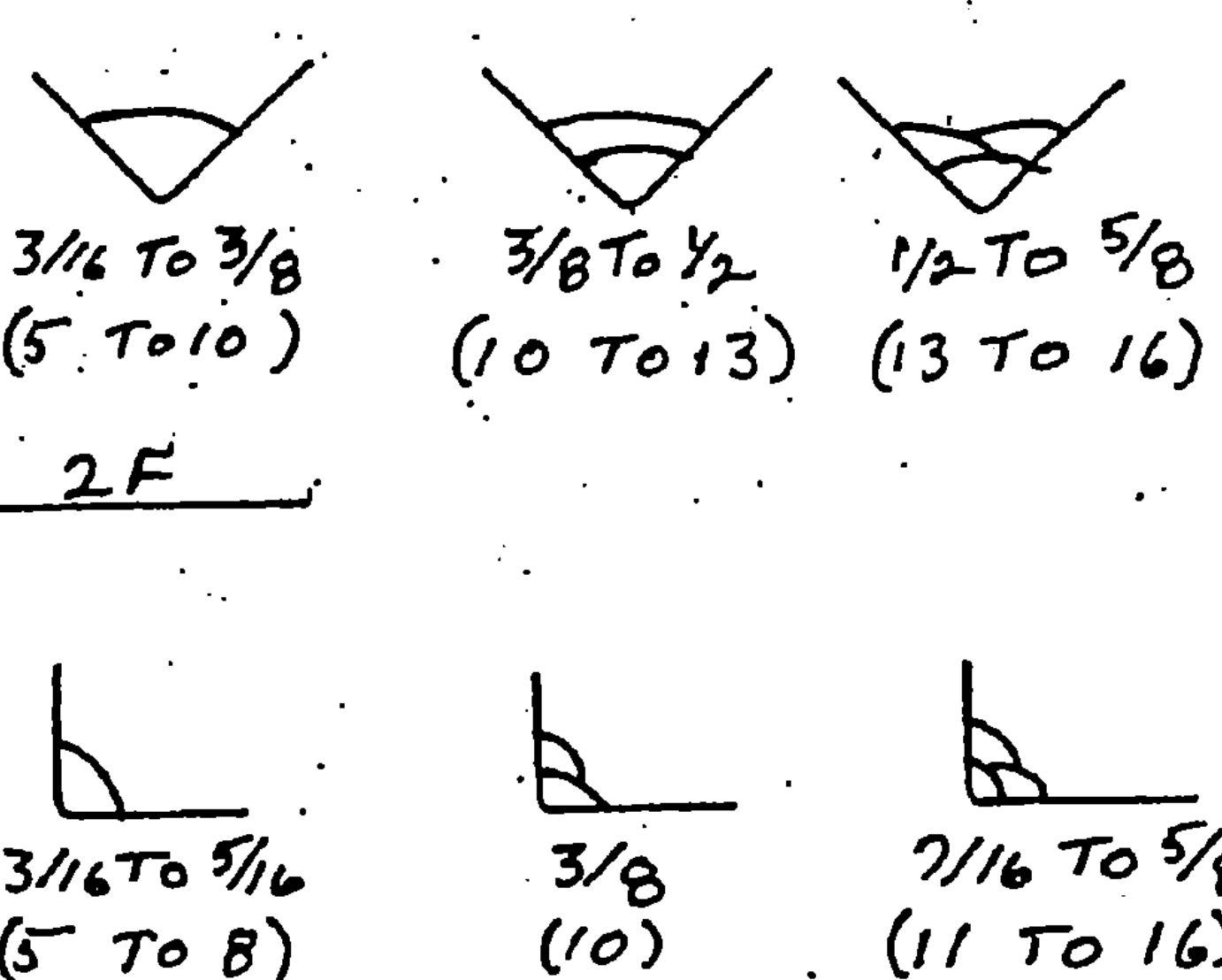
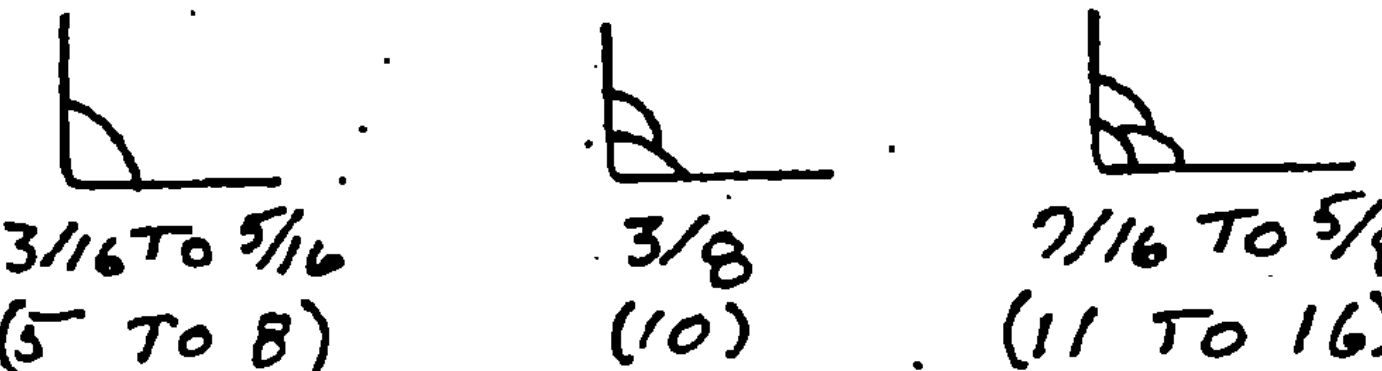
APPROVED

DATE 12/07/10

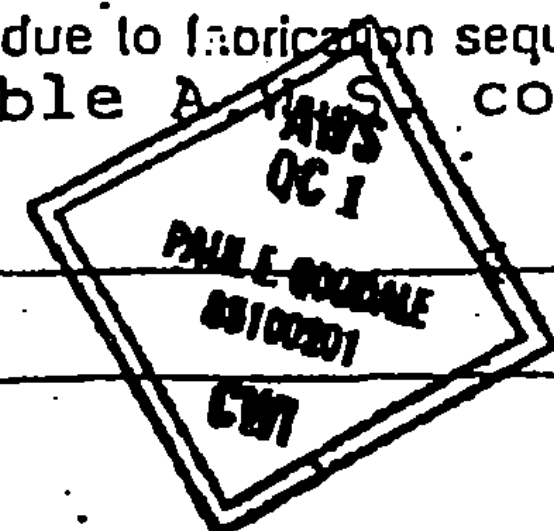
VT - ACT, BRIDGEWATER  
 Proj # BRS 0149(4)  
 BR # 14, CBSS 454

### WELDING PROCEDURE

(metric)

| Pass no. | Electrode size               | Welding current |       | Travel speed | AWS D1.5                 | Joint detail             |                           |  |
|----------|------------------------------|-----------------|-------|--------------|--------------------------|--------------------------|---------------------------|--|
|          |                              | Amperes         | Volts |              |                          | FILLET                   |                           |  |
| AS REQ.  | <u>7018</u><br>1/8<br>(3.2)  | 70-170          | 22-26 | AS REQ.      | 3/16 TO 3/8<br>(5 TO 10) | 3/8 TO 1/2<br>(10 TO 13) | 1/2 TO 5/8<br>(13 TO 16)  |  |
|          | 5/32<br>(3.9)                |                 |       |              |                          |                          |                           |  |
|          | 3/16<br>(4.8)                | 170-300         | 24-27 |              |                          |                          |                           |  |
|          | <u>8018</u><br>1/8<br>(3.2)  | 90-160          | 22-26 |              |                          |                          |                           |  |
|          | 5/32<br>(3.9)                | 120-225         | 22-26 |              |                          |                          |                           |  |
|          | 3/16<br>(4.8)                | 180-290         | 24-27 |              |                          |                          |                           |  |
| AS REQ.  | <u>7028</u><br>5/32<br>(3.9) | 170-270         | 22-26 | AS REQ.      | 3/16 TO 5/16<br>(5 TO 8) | 3/8<br>(10)              | 7/16 TO 5/8<br>(11 TO 16) |  |
|          | 3/16<br>(4.8)                |                 |       |              |                          |                          |                           |  |
|          | 5/32<br>(3.9)                | 170-270         | 22-26 |              |                          |                          |                           |  |

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in applicable AWS codes or contract specifications



Procedure no. 401

Revision no. \_\_\_\_\_

Form III-2

Contractor Casco Bay Steel

Authorized By Paul E. Hoodale

Date 8/28/10