

GENERAL NOTES

1.0 THIS DRAWING WAS DEVELOPED AS A TYPE PLAN TO PROVIDE TYPICAL COFFERDAM FABRICATION DETAILS FOR NAVAL SURFACE SHIPS. IT IS BASED UPON THE REQUIREMENTS OF NAVSEA NSTM S0600-AA-PRD-160/CHAPTER 16 UNDERWATER SHIP HUSBANDRY MANUAL DATED 1 FEBRUARY, 1996.

2.0 THIS DRAWING IS BASED UPON THE REQUIREMENTS OF NAVSEA S9AAO-AB-GDS-010 (2000 EDITION) AND NAVSEA S0600-AA-PRD-160/CH 16 (COFFERDAMS) (1996 EDITION) WHOSE PROVISIONS SHALL PREVAIL IN AREAS WHERE THIS DRAWING IS SILENT.

3.0 EXCEPT WHERE OTHERWISE NOTED OR APPROVED BY NAVSEA, THE EFFECTIVE DATE OF FEDERAL OR MILITARY SPECIFICATIONS, PUBLICATIONS AND STANDARD/TYPE DRAWINGS AND REVISIONS AND CHANGES THERETO, SHALL BE THE EFFECTIVE DATE DEFINED IN NAVSEA S9AAO-AB-GDS-010 (2000 EDITION). LATER SPECIFICATION REVISIONS MAY BE USED PROVIDED THEY MEET THE INTENT AND INTERFACE REQUIREMENTS OF THE SPECIFICATION INVOKED FOR THE SPECIFIC AVAILABILITY.

4.0 ENGINEERING DATA SUPPORTING THIS DRAWING IS SHOWN ON REFERENCE 2.

5.0 THE PURPOSE OF THIS DRAWING IS TO PROVIDE STANDARD FABRICATION DETAILS FOR COFFERDAM/PATCHES INCIDENTAL TO SHIPBOARD SEA VALVE WORK WATERBORNE.

6.0 THE NUMBER AND LETTER IN PARENTHESES (<) UNDER EACH VIEW DENOTES THE VIEW FROM WHICH IT WAS TAKEN.

7.0 AN ASTERISK (*) APPEARING OPPOSITE A REFERENCE DENOTES A REQUIRED REFERENCE. A REQUIRED REFERENCE IS ANY REFERENCE REQUIRED TO ACCOMPLISH INDUSTRIAL WORK AND ORDER MATERIAL.

8.0 THE SHOCK REQUIREMENTS OF NAVSEA S9AAO-AB-GDS-010 (2000 EDITION) ARE NOT APPLICABLE TO THIS DRAWING.

9.0 FABRICATION AND WELDING SHALL BE IN ACCORDANCE WITH MIL-STD-1689, REV 'A'. SEE TEST NOTES FOR NDT REQUIREMENTS.

9.1 DURING FABRICATION ALL TOLERANCES SHOWN IN THE DIMENSIONAL TOLERANCE BLOCK ON SHEET 1 OF THIS DRAWING SHALL BE MAINTAINED.

9.2 A CONTROLLED WELDING PROCEDURE SHALL BE OBTAINED FROM A WELDING ENGINEER AND FOLLOWED TO PREVENT THE INTRODUCTION OF WELDING STRESSES INTO THE FINISHED COFFERDAM.

9.3 IF WELDING STRESSES CAUSE THE COFFERDAM TO BE MISSALIGNED OR WARPED, FABRICATOR SHALL NOT UTILIZE A PRESS TO STRAIGHTEN OR REALIGN THE COFFERDAM WITHOUT THE EXPRESSED WRITTEN PERMISSION FROM THE ENGINEERING AND PLANNING DEPARTMENT, CODE 252, OF NORFOLK NAVAL SHIPYARD.

10.0 PAINTING SHALL BE IN ACCORDANCE WITH NAVSEA TECH MANUAL S9086-VJ-STM-000/CHAPTER 631, PRESERVATION OF SHIPS IN SERVICE (SURFACE PREPARATION AND PAINTING) AS FOLLOWS:

10.1 APPLY ONE COAT OF BR235 (BUFF) PRIMER 4-6 MILS DFT

10.2 APPLY TWO (2) COATS OF WHITE BR235 4-6 MILS DFT.

11.0 GRIND SMOOTH ALL SHARP CORNERS, BURRS, AND ROUGH EDGES LIABLE TO CAUSE INJURY TO PERSONNEL AND/OR EQUIPMENT.

12.0 REFERENCES 1 AND 2 ARE FOR DESIGN USE ONLY AND ARE NOT REQUIRED TO ACCOMPLISH WORK ON THIS DRAWING.

13.0 THE COFFERDAM/PATCHES SHOWN HEREIN ARE DESIGNED FOR A MAXIMUM DEPTH OF 40'-0" BELOW THE WATERLINE.

14.0 UPON COMPLETION OF FABRICATION AND PAINTING, A LABEL PLATE SHALL BE INSTALLED ON THE COFFERDAM/PATCH TO IDENTIFY THE COFFERDAM/PATCH WITH THE FOLLOWING INFORMATION:

NAVSEA DRAWING NUMBER 53711-805-7370421
DATE MANUFACTURED
MODEL NUMBER & SERIAL NUMBER

15.0 COFFERDAM/PATCHES, IN AREAS OF THE SHIPS HULL THAT HAVE SHAPE, SHALL BE FABRICATED TO CONFORM TO THE HULL CONFIGURATION. FABRICATOR SHALL UTILIZE THE SHIPS HULL SPECIFIC MOLD LOFT/TABLE OF OFFSETS DRAWING TO DETERMINE THE EXACT CONFIGURATION OF THE HULL IN THE AREA OF THE SEA CHEST. THE FABRICATOR SHALL MAINTAIN THE DIMENSIONS FOR THE COFFERDAM AND ITS APPURTENANCES AS SHOWN ON THIS DRAWING.

16.0 COFFERDAM GASKETS SHALL BE INSTALLED UTILIZING RUBBER ADHESIVE, MATERIAL STANDARD MMM-A-1308. ADHESIVE SHALL BE APPLIED TO THE GASKET MATERIAL AND TO THE GASKET MOUNTING SURFACE ON THE COFFERDAM. ADHESIVE SHALL BE ALLOWED TO DRY AND A SECOND COAT OF ADHESIVE SHALL BE APPLIED TO BOTH SURFACES. AFTER SECOND COAT OF ADHESIVE IS TACKY DRY, THE GASKET SHALL BE INSTALLED ON THE COFFERDAM GASKET MOUNTING SURFACE IN A MANNER TO PROHIBIT THE CAPTURE OF AIR BETWEEN THE GASKET AND THE COFFERDAM MOUNTING SURFACES AND TO PROVIDE COMPLETE ADHESION BETWEEN THE GASKET AND THE COFFERDAM.

TEST NOTES

T-1. ALL COMPLETED WELDS SHALL BE NON DESTRUCTIVE TESTED BY VISUAL INSPECTION IN ACCORDANCE WITH MIL-STD-1689.

T-2. WHERE THIS NOTE IS REFERENCED TO IN THE BODY OF THE DRAWING, WATER TIGHTNESS TESTING IS REQUIRED IN ACCORDANCE WITH REFERENCE 3.

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Table with 4 columns: SHEET NUMBER, ITEM NUMBER, TITLE, SIZE OF HOLE IN SHELL INCLUDED ON SHEET. Rows include COVER SHEET, ROUND FLAT COFFERDAM, RECTANGULAR FLAT COFFERDAM (SMALL/LARGE), ROUND HAT TYPE COFFERDAM (SMALL), ROUND HAT TYPE COFFERDAM (LARGE), RECTANGULAR BOX TYPE COFFERDAM (SMALL/LARGE), COFFERDAM ANCHOR DEVICE (BRAKE SHOE TYPE), COFFERDAM ANCHOR DEVICE (SUPPORT BRACE ASSY), J-BOLT AND ACCESSORIES, TYPICAL COFFERDAM INSTALLATION PROCEDURE, CVN CL STERN TUBE COFFERDAM, CVN CL STERN TUBE COFFERDAM INSTALLATION DETAILS, BELLY BAND STANDOFF DETAILS.

REVISIONS

Table with 4 columns: REV, ZONE, DESCRIPTION, ENGR DATE. Rows A through G describe revisions such as 'ADDED MODEL NUMBER 15 AND MODIFIED DIMENSION 'J' FOR CLARITY', 'ADDED MODEL NUMBER 45', 'ADDED GENERAL NOTE 16.0 AND ADDED REFERENCE TO GN 16.0 ON SHTS 2 THROUGH 8, 12 AND 13', 'SHEETS REVISED TO SUIT DIVER COMMENTS AND NAVSEA ODCS REQUEST', 'SHEETS REVISED TO SUIT NAVSEA ODCS COMMENTS', 'ADDED MODEL 23 FOR AS-39/40 SCOOP SEACHEST', 'REVISED SHEETS TO SUIT DIVER COMMENTS. MOVED CVN CL STERN TUBE COFFERDAM DRAWINGS TO NAVSEA DWG NO. 805-8173727.'

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Table with 4 columns: REV, ALTERATION NUMBER, WT GR, WT (LBS). Rows G through A show 'NO CHANGE' for various revision numbers.

WEIGHT CONTROL DATA

WEIGHT IN POUNDS TO THE NEAREST POUND
LEVERS IN FEET TO THE NEAREST TENTH OF A FOOT
USE SEPARATE LINES FOR EACH WT GR, S/A, REV, WT INSTL, WT RMV
I=INSTALL R=REMOVAL X=LOAD ITEM INSTALLED XR=LOAD ITEM REMOVED
F=FWD A=AFT P=PORT S=STBD O=CENTERLINE

THIS DRAWING MODIFIES NO KNOWN DRAWING.
* DENOTES REQUIRED REFERENCE - SEE NOTE 7

REFERENCES

Table with 4 columns: NO., HULL, TITLE, IDENT. Rows include SURFACE SHIP - TIGHTNESS REQUIREMENTS, ENGINEERING CALCULATIONS, UNDERWATER SHIP HUSBANDRY.

Table with 4 columns: DIM, DEC, FRAC, SYM, GEOMETRY (WHERE IND), TOL. Rows include DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED, MACH / FAB, GEOMETRIC (WHERE IND), DIM, DEC, FRAC, SYM, GEOMETRY (WHERE IND), TOL, UNDER 6, 6 TO 24, OVER 24, DIM ARE IN INCHES, TOL ON ANGLES ± 0.5°, FILLETS & RADII TO BE ± 1/32, DURING FABRICATION - TOLERANCES SHALL BE MAINTAINED.

Table with 4 columns: SHIP, REV, SHIPCK BY, DT. Rows include AD-177 CL, ARS-50 CL, AS-36 CL, AS-39 CL, DDG-51 CL, FFG-7 CL, CG-47 CL, DDG-963 CL, DDG-993 CL, SHIP, REV, SHIPCK BY, DT.

LEAD CODE DATE SIGNATURE

SYMBOLS & TOL IN ACCORDANCE WITH ANSI Y14.5

REVISION STATUS OF SHEETS

SHIP REV SHIPCK BY DT

SHIP REV SHIPCK BY DT

NORFOLK NAVAL SHIPYARD, DEPARTMENT OF THE NAVY NAVAL SEA SYSTEMS COMMAND WASHINGTON NAVY YARD, D.C. 20376-1010. NNSY HULL TYPE COFFERDAM STANDARD DRAWING. APPROVED FOR NAVSEA. APPROVED BY NAVSEA NOT REQUIRED. SCALE: AS SHOWN. CODE/DEPT: C-252. SHEET 1 OF 15.