### SFLC STANDARD SPECIFICATION 8636

# TEMPORARY HULL ACCESSES

# 1. SCOPE

1.1 <u>Intent</u>. This standard specification describes the requirements for the Contractor to install and close temporary accesses onboard Coast Guard vessels.

1.2 <u>Acronyms and term definitions</u>. Below are definitions and various acronyms and terms that are used in this standard or may be encountered in work item specifications.

- Access cut: Access cuts (sometimes referred to as access plates) are those sections of plating removed and later reinstalled for access and installation or removal of equipment. Access plates do not involve cutting of hull frames.
- **Butt**: A butt is a transverse or vertical plate edge connection in the shell, bulkhead, or deck plating (the plate butt is perpendicular to the plate seam).
- **Closure plate**: Similar to large access cuts wherein at least one transverse frame is cut.
- **Primary hull structure**: Primary hull structure consists of the main strength decks and shell plating and their supporting framing, principal longitudinal bulkheads, vertical keel, deep web girders and stiffeners designed to withstand the ship bending stress. This also includes primary support structure which consists of the collision bulkhead, main transverse and bent bulkheads, and foundations that are integral parts of the primary girder and primary support structure.
- Seam: A seam is a fore-and-aft or horizontal plate edge connection in the shell, bulkhead, or deck plating.

### 2. REFERENCES

### **COAST GUARD DRAWINGS**

None

#### **COAST GUARD PUBLICATIONS**

Surface Forces Logistics Center Standard Specification 0740 (SFLC Std Spec 0740), Latest Revision, Welding and Allied Processes

### **OTHER REFERENCES**

- U.S. Code of Federal Regulations (CFR) Title 29, Part 1915, July 2016, Occupational Safety and Health Standards for Shipyard Employment
- NAVSEA S0600-AA-PRO-160/CH16, Nov 2011, Underwater Ship Husbandry Manual, Chapter 16 Cofferdams

MIL-C-20079, July 1987, Cloth, Glass; Tape, Textile Glass; and Thread, Glass and Wire-Reinforced Glass

# 3. REQUIREMENTS

3.1 <u>Prior approval</u>. Holes or openings, except those shown or indicated by drawings or specifications, must not be cut in any watertight bulkhead, deck, or shell plating except as approved by the KO. No cuts shall be made in sheer, stringer or bilge strakes, major transverse framing, or in the flat keel unless approved by the KO, on a case-by-case basis, prior to making the cut.

3.2 <u>Drawing submission</u>. A minimum of five working days before creating a temporary structural access opening, the Contractor shall submit one legible drawing of the proposed access to the KO for authorization. The drawing shall include the following, as a minimum:

- A description of the temporary access, including interferences, and plans for the removal and reinstallation of the interferences.
- A plan and elevation view specifying the access opening shape and dimensions.
- Location of the access with respect to deck or distance above the ships baseline, frame, and distance from the centerline, deck edge or existing longitudinal structure; in addition, show the location relative to adjacent penetrations, bulkheads, framing, and welds within 12 inches of the proposed cut.
- Identification (i.e. shell, deck, bulkhead), thickness and material of plating and structural members to be cut.
- Temporary structural reinforcement required to prevent distortion of ship's structure.
- Welding details and procedures for removal and reinstallation of access closure plates (including weld sequence, design and material of closure plate(s), and indication of any permanent or temporary weld backing straps, or ceramic backing materials).
- Indication of any cutback of existing welds forming the boundary of the access cuts and the welding sequence for (re)installation of the closure plate.
- Nondestructive inspections and Structural Boundary tests for completed installations.

### NOTE

NAVSEA S0600-AA-PRO-160/CH16 provides requirements for design, fabrication, and installation of temporary watertight closures.

3.5 <u>Closure plate restoration</u>. The Contractor shall remove any temporary closures when no longer required, and install permanent closure plates in accordance with the applicable authorized drawings. Access closure plate weld joints shall be 100% efficient full penetration welds. Welds in primary hull structure or in watertight boundaries, shall be full penetration welds without permanent backing straps.

3.6 <u>Welding, testing and inspection</u>. All welding shall be in accordance with SFLC Std Spec 0740. All compartment/boundary testing and NDE shall be in accordance with SFLC Std Spec 0740, Appendix C.

# 4. NOTES

This section is not applicable to this Standard Specification.