Designation: F 1385 – 92

An American National Standard

Standard Practice for Platforms in Cargo Tanks[1]

This standard is issued under the fixed designation F 1385; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice provides design, construction, and installation criteria for platforms in cargo tanks.

1.2 Where platforms are attached to ladders see Fig. 1, Fig. 2, Fig. 3, and Fig. 4.

1.3 The valves stated in SI (metric) units are to be regarded as the standard. The inch-pound units given in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

A 36 Specification for Structural Steel[2]

2.2 *Military Specifications:*

MIL-C-277258 Coatings, Corrosion Preventive, for Aircraft Integral Fuel Tanks[3]

MIL-G-18015 Grating, Metal, Other than Bar Type (Shipboard Use)[3]

2.3 *ABS Standard:*

American Bureau of Shipping Rules for Building and Classing Steel Vessels[4]

2.4 *AWS Standard:*

AWS D1.1 Structural Welding Code[5]

3. Significance and Use

3.1 This practice establishes the procedure for the construction and installation of platforms to be fabricated and installed by the shipyards within the cargo tanks.

4. Materials and Manufacture

4.1 *Materials*:

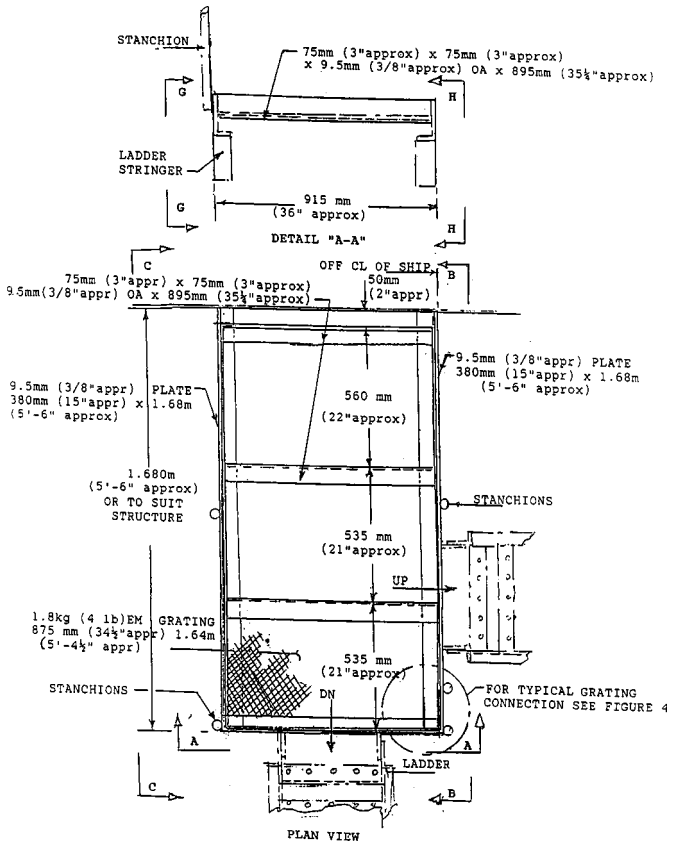

FIG. 1 Cargo Platform—Bulkhead

4.1.1 *Gratings*—1.8-kg (4-lb) expanded metal fabricated in accordance with MIL-G-18015.

4.1.2 *Flanged Plate Supports*—Fabricated from 10 by 380 mm (approximately ⅜by 15 in.) of carbon steel in accordance with Specification A 36.

4.1.3 *Angle Supports*—75- by 75- by 10-mm (approximately 3- by 3- by ⅜-in.) structural angles of carbon steel in accordance with Specification A 36.

4.1.4 *Stanchions*—25-mm (approximately 1-in.) diameter carbon steel.

4.2 *Manufacture*:

4.2.1 Platforms shall be constructed as shown in Figs. 1-4.

4.2.2 The dimensions indicated in Figs. 1-4 are for the commonly used sizes. However, dimensions can be modified to suit other existing structures.

4.2.3 Platforms shall be designed to support static loads of

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[1] This practice is under the jurisdiction of ASTM Committee F-25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.03 on Outfitting.

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[2] *Annual Book of ASTM Standards*, Vol 01.04.

[3] Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

[4] Available from American Bureau of Shipping, ABS Plaza, 16855 Northchase Dr., Houston, TX 77060.

[5] Available from American Welding Society, 550 N.W. LeJuene Rd., Miami, FL 33126.

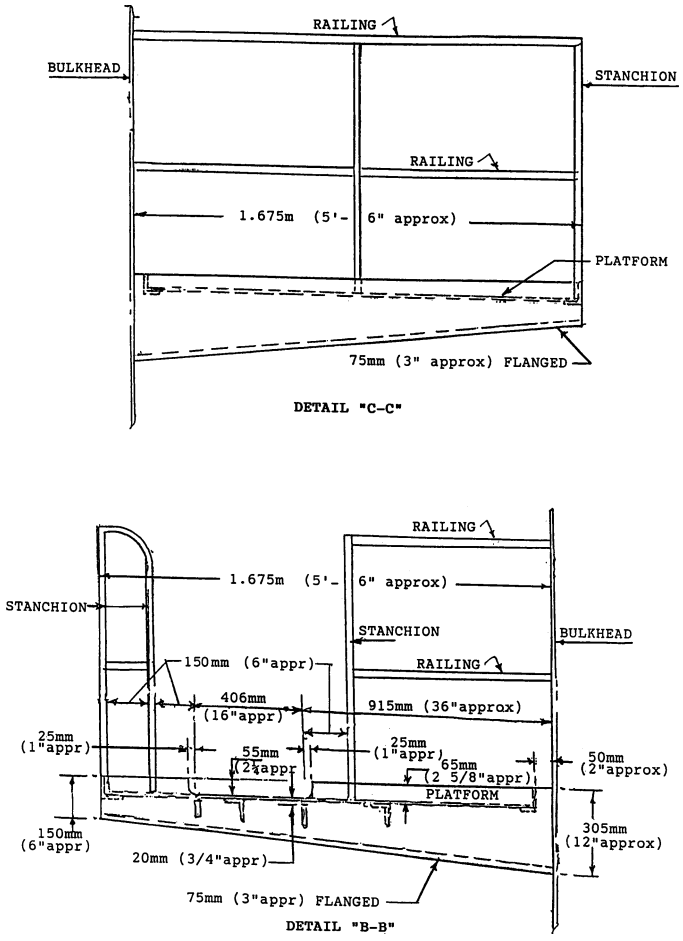

FIG. 2 Cargo Platform Elevation

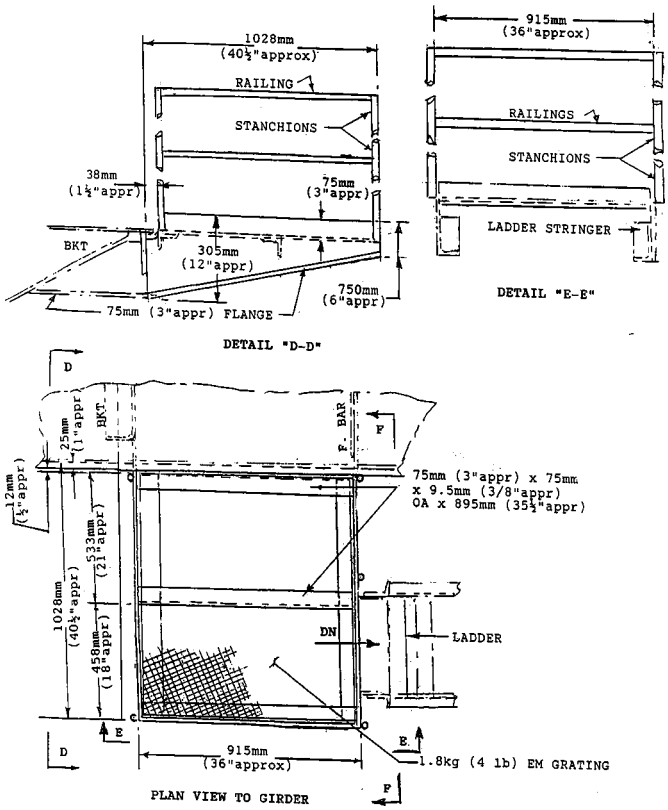

FIG. 3 Cargo Platform—Girder

at least 1380 kPa (approximately 200 psi).

4.2.4 Platforms shall be locally reinforced where greater loads are contemplated for removal or disassembly of machinery.

4.2.5 All welding shall be in accordance with American Bureau of Shipping Rules for Building and Classing Steel Vessels or AWS D1.1.

4.2.6 Tolerances shall be ±6 mm (approximately ¼ in.).

5. Workmanship, Finish, and Appearance

5.1 Platforms shall be free of all sharp edges, burrs, projections, weld splatter, and other defects that might be injurious to personnel or equipment, or both.

5.2 For cargo tanks carrying cargo other than fuel oils, coat platforms with one coat 3.0-MIL dry film thickness inorganic zinc silicate following surface preparation in accordance with the Steel Structure Painting Council Specifications[6] or the manufacturer's paint instructions.

5.3 For spaces carrying fuel oil cargo, one coat of 3.0-MIL dry film thickness of corrosion preventive coating shall be applied to the platforms in accordance with MIL-C-277258.

[6] Available from Steel Structures Painting Council (SSPC), 4400 Fifth Ave., Pittsburgh, PA 15213.

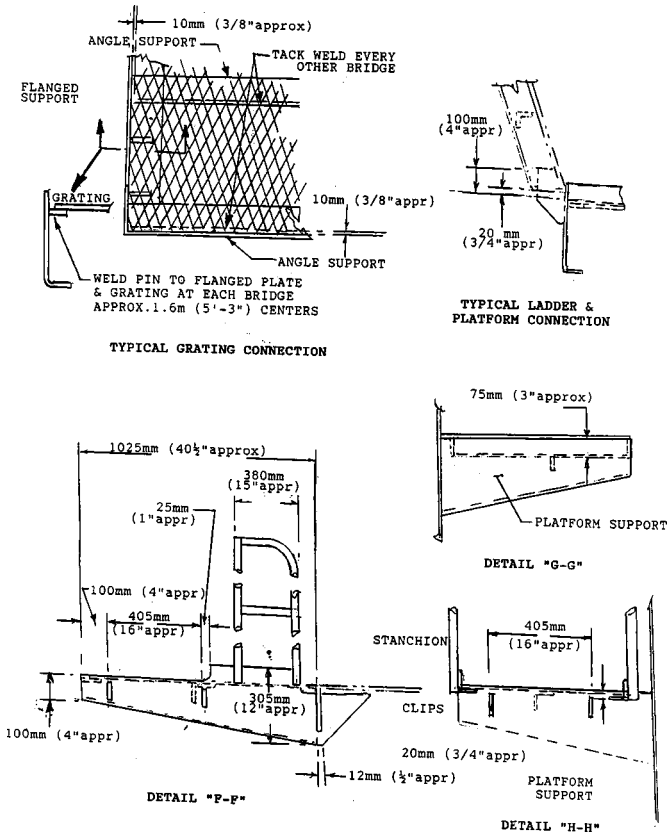

FIG. 4 Cargo Platforms Showing Typical Sections