Designation: F1121 – 87 (Reapproved 2015)

An American National Standard

Standard Specification for International Shore Connections for Marine Fire Applications[1]

This standard is issued under the fixed designation F1121; 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 specification covers the design and manufacture of international shore connections to be used with marine fire fighting systems during an emergency when a stricken ship has a system failure.

1.2 International shore connections are portable universal couplings that permit connection of shipboard firemain systems between one ship and another or between a shore facility and a ship when their respective system threading is mismatched. Both the ship and the facility are expected to have a fitting such that in an emergency can be attached to their respective fire hose and bolted together to permit charging the ship's system. It must be portable to accommodate hose to hose connection and allow assistance from any position.

1.3 The international shore connection is required by international treaty[2,3] to be carried onboard all passenger and cargo vessels of 500 gross tons or more, regardless of firemain size, engaged in international voyages, and is recommended for all vessels that would be expected to render assistance. It is also intended to be provided at shore facilities that would be used to supply water to a ship's firemain system.

1.4 Fabrication either on board a vessel, in a shipyard, or other shore facility is not precluded by this specification.

1.5 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

2. Ordering Information

2.1 The purchase order or inquiry for an international shore connection shall include the following as applicable:

2.1.1 Material of construction.

2.1.2 Title, number, and latest revision of this specification.

2.1.3 Maximum operating pressure (psig) (when above 150 psig, see 4.2).

2.1.4 Preservation (coating) requirements (if any, see 7.2).

2.1.5 Diameter and threading to be provided in the coupling.

3. Materials and Manufacture

3.1 The international shore connection may be machined from forgings, castings, plate or bar stock, or may be fabricated out of more than one piece.

3.2 The material shall be brass, bronze, or other suitable corrosion-resistant material. When fabricated out of more than one piece, the flange may be steel and the coupling a corrosion-resistant material. Aluminum shall not be used.

3.3 Nuts, bolts, and washers shall be a corrosion-resistant material.

4. Other Requirements

4.1 *Design:*

4.1.1 The connection shall consist of a flat face flange and a threaded coupling. Threading shall be specified by the purchaser.

4.1.2 The dimensions of the international shore connection shall be in accordance with Fig. 1.

4.2 The maximum allowable working pressure (MAWP) shall be at least 150 psig (1 N/mm^2).

4.3 The international shore connection shall be supplied with four bolts, ⅝ in. (16 mm) in diameter, at least 2 in. (50 mm) in length, and threaded at least to within 1 in. (25 mm) of the bolt head.

4.3.1 The bolts shall be supplied with four corresponding nuts and eight washers.

4.4 The international shore connection shall be supplied with a flange gasket suitable for the MAWP and seawater service.

5. Workmanship, Finish, and Appearance

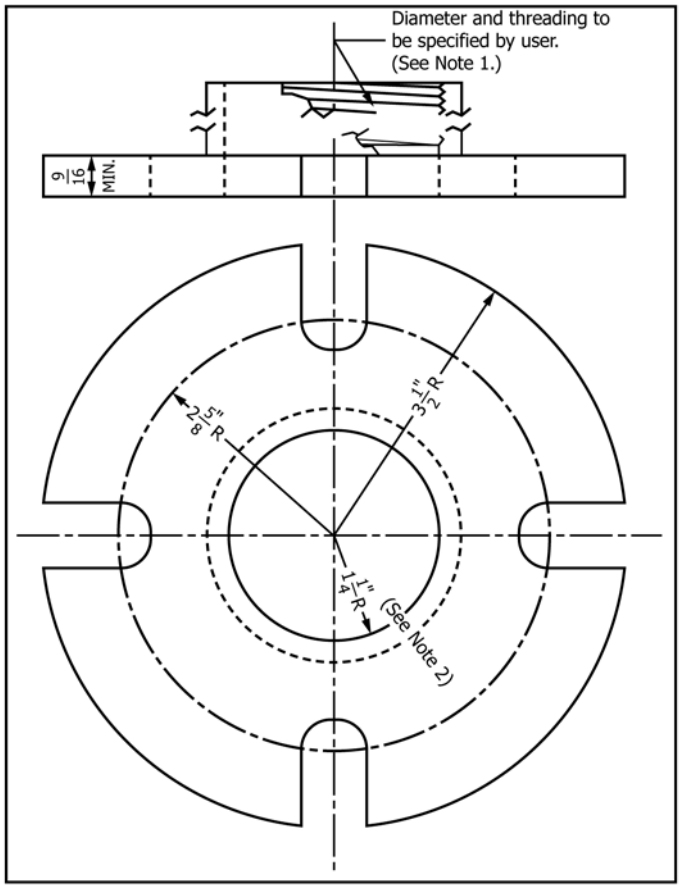
5.1 The quality of workmanship shall be such as to produce a product that is in accordance with the requirements of this

[1] This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.11 on Machinery and Piping Systems.

Current edition approved May 1, 2015. Published June 2015. Originally approved in 1987. Last previous edition approved in 2010 as F1121 – 87 (2010). DOI: 10.1520/F1121-87R15.

[2] Amendments to the International Convention for the Safety of Life at Sea, Chapter II-2, Regulation 19, "International Shore Connection," 1974.

[3] International Maritime Organization Assembly Resolution A, XII 470, Jan. 4, 1987. This document is available from International Maritime Organization, 4 Albert Embankment, London, U.K. SE1 7SR.



NOTE 1—Fire hose coupling may be used.
NOTE 2—For 1½-in. fire hose coupling, the radius will be ¾ in.
NOTE 3—1 in. = 25.4 mm.

FIG. 1 International Shore Connection

specification. Completed units shall be free from imperfections or defects that materially affect appearance or that may affect serviceability.

6. Inspection

6.1 Each finished international shore connection shall be visually examined and dimensionally checked to ensure it corresponds to this specification.

7. Packaging and Preservation

7.1 Unless otherwise specified, the international shore connection shall be packaged for shipment in accordance with the manufacturer's standard commercial practice.

7.2 Preservation of the international shore connection, by the manufacturer or user, shall be satisfactory for preventing deterioration of the connection during long-term storage on vessels or at shore facilities.

8. Quality Assurance

8.1 The manufacturer shall use quality assurance procedures that assure manufacture of high quality international shore connections that are designed in accordance with this specification.

9. Keywords

9.1 fire fighting systems; international shore connections; hose-to-hose connection; marine fire applications; portable universal couplings; shipboard firemain systems; stricken ship