



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

21-2146530-PDA
04-Aug-2021
03-Aug-2026
Houston SED Structures -
Commercial

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

BAIER MARINE COMPANY, INC.

located at

**ENGINEERING AND GENERAL OPERATIONS, 2920 AIRWAY
AVENUE, COSTA MESA, CA, United States, 92626**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Hatch Cover
Model: BFHO 15"x24" Oval, BFHHO 15" x 24" Hinged Oval [Hex-wench or T-handle, cast steel or aluminum cover];
BFHR 14", 16", 18", 20" and 24" Round [Hex-wench or T-handle, cast steel or a...
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 03/Aug/2026 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Suresh K Pisini

Suresh Kumar Pisini, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

BAIER MARINE COMPANY

ENGINEERING AND GENERAL OPERATIONS

2920 AIRWAY AVENUE

COSTA MESA CA

United States 92626

Telephone: TOLL FREE: (800) 455-3917 DIRECT: (206) 709-1500

Fax: (206) 632-2441

Email: sales@baiermarine.com

Web: www.baiermarine.com

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Product: Hatch Cover
Model: BFHO 15"x24" Oval, BFHHO 15" x 24" Hinged Oval [Hex-wench or T-handle, cast steel or aluminum cover];
BFHR 14", 16", 18", 20" and 24" Round [Hex-wench or T-handle, cast steel or aluminum cover];

Endorsements:**Intended Service:**

Flush watertight hatch assemblies for Marine Vessels and Offshore Installations.

Description:

Round (BFHR) and oval (BFHO) hatched are lift-out, flush, screw-type watertight hatches, with a stainless steel center-bolt actuated either by a detachable hex-wrench or pop-up recessed T-handle, to engage a strongback. The same style is offered in an oval, hinged variant (BFHHO). This enables the cover to remain attached to the deck surface and allows pivoting behavior when opening and closing. Covers, strongbacks and deck rings are of cast steel or cast aluminum. Hatch cover gasket is a one-piece molded neoprene and forms a watertight seal between the deck ring and hatch cover edge ring. Clear openings are 14", 16", 18", 20" and 24" round and 15" x 24" oval.

Rating:

Load rating in head of water (top side of hatch only):

BFHO/BFHHO 15"x24" oval, aluminum cover (12.9 ft, or 3.93 m), steel cover (48.7 ft or 14.8 m);

BFHR 14" round, aluminum cover (7.87 ft, or 2.40 m);

BFHR 16" round, aluminum cover (5.28 ft, or 1.61 m), steel cover (28.58 ft or 8.71 m);

BFHR 18" round, aluminum cover (7.35 ft, or 2.24 m), steel cover (30.98 ft or 9.44 m);

BFHR 20" round, aluminum cover (6.43 ft, or 1.96 m), steel cover (24.40 ft or 7.44 m);

BFHR 24" round, aluminum cover (6.12 ft, or 1.87 m), steel cover (26.14 ft or 7.97 m);

Service Restriction:

1. Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

2. This product is NOT to be installed on the exposed fore deck of vessels over 80 meter (263 ft) in length L (L is the scantling length of a ship), within the forward 0.25L, where the deck in way of the hatch is less than 0.1L or 22 meter (72.2 ft) above the summer load line, whichever is less, as per ABS Marine Vessels Rules 3-2-15/13. Aluminum covers are not allowed on cargo decks as per ABS Marine Vessels Rules 3-2-15/7.1. These hatches are NOT for use in watertight bulkheads, internal decks and external openings below damage waterline (see Marine Vessels Rules 3-2-9, 3-2-15/17). When installing a hatch, consideration is to be given to preventing corrosion arising from using dissimilar metals. Hatch covers are tested as per 3-7-1/Table 1/16 of Marine Vessels Rules, upon installation. Aluminum casting material tests to be in accordance with ABS Rules for Materials and Welding 2-5-10. Steel casting material tests to be in accordance with ABS Rules for Materials and Welding 2-1-5.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

2. For each installation, drawings are to be submitted for review for verification that the cover scantlings, materials and arrangements, including closing arrangements are acceptable for the proposed location. Deck mounting ring is to be welded on both sides to the structure in which the hatch is installed. Hatch installation and operation to be in accordance with the manufacturer's instructions.

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Notes/Drawing/Documentation:

Drawing No. 08861-111A, Hatch Assy, T-handle AL #500 (BFHO 15x24), Revision: D, Pages: 2
Drawing No. 08861-121A, Hatch Assy, T-Handle Hinge AL #525 (BFHHO 15x24), Revision: B, Pages: 2
Drawing No. 08861-121B, Hatch Assy, T-Handle Hinge Al Cover Stl Dr #525 (BFHHO 15x24), Revision: A, Pages: 2
Drawing No. 08861-131A, Hatch Assy, T-Handle Al All #200 (BFHR 20), Revision: D, Pages: 2
Drawing No. 08861-161A, Hatch Assy, G-Handle Hinge Alum #543-I (BFHHO 15x24), Revision: A, Pages: 2
Drawing No. 08861-161C, Hatch Assy, G-Handle Hinge Steel All, #543-I (BFHHO 15x24), Revision: A, Pages: 2
Drawing No. 08861-191A, Hatch Assy, AL All #286-1 (BFHR 20), Revision: E, Pages: 3
Drawing No. 08861-191C, Hatch Assy Stl All #286-1 (BFHR 20), Revision: C, Pages: 2
Drawing No. 08861-101A, Hatch Assy Alum #541 15x24 (BFHO 15x24), Revision: D, Pages: 2
Drawing No. 08861-181A, Hatch Assy, Al #630 (BFHR 24), Revision: D, Pages: 4
Drawing No. 08861-181C, Hatch Assy, Stl All #630 (BFHR 24), Revision: C, Pages: 2
Drawing No. 08863-101C, Hatch Assy Stl All #286-1 (BFHR 18), Revision: D, Pages: 2
Drawing No. 08863-101A, Hatch Assy, AL ALL #286-1 (BFHR 18), Revision: C, Pages: 2
Drawing No. 08863-121A, Hatch Assy, AL #286-1 (BFHR 16), Revision: C, Pages: 2
Drawing No. 08863-121C, Hatch Assy Stl #286-1 (BFHR 16), Revision: C, Pages: 2
Drawing No. 08863-131A, Hatch Assy, Al All #286-1 (BFHR 14), Revision: B, Pages: 2

Terms of Validity:

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STANDARDS**ABS Rules:**

2021 ABS Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3, 1-1-A4
2021 ABS Rules for Conditions of Classification – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following
2021 ABS Marine Vessel Rules: 3-2-15/21.1
2021 ABS Rules for Building and Classing Mobile Offshore Units: 3-3-2/5.3
2021 ABS Materials and Welding Rules: 2-5-5

National:

NA

International:

NA

Government:

NA

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EUMED:

NA

OTHERS:

NA