

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 21-2164629-PDA 24-Sep-2021 23-Sep-2026 Houston OED - Safety

CERTIFICATE OF

Product Design Assessment

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

DEANSTEEL MANUFACTURING COMPANY

located at

931 S. FLORES ST., SAN ANTONIO, TX, United States, 78204-1406

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:	Door, A-60
Model:	IMO A-60 / H-60 Marine Doors
Endorsements:	
Tier:	2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 23/Sep/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

Daniel Hyun SON Hyun Young Son,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)

DEANSTEEL MANUFACTURING COMPANY

931 S. FLORES ST. SAN ANTONIO TX United States 78204-1406 Telephone: 210-226-8271 Fax: 210-224-7910 Email: nvalentin@deansteel.com Web: deansteel.com

Tier: 2 - PDA Issued

Product:Door, A-60Model:IMO A-60 / H-60 Marine Doors

Endorsements:

Intended Service:

Marine and Offshore Applications - Marine Doors, 1). H-60 Single Leaf Door; 2). DS H-60 Pair 5.5" Door; 3). DS H-60 5.5" Door.

Description:

1). H-60 Single Leaf Door; Leaf Size: 1206 x 2580 mm; 106mm thickness Lock: DS 3-Point Lock Hinge: HD Continuous (stainless steel) Closer: Dorma HD 8900 Series.

2). DS H-60 Pair 5.5" Door;
Leaf Size: 1219 x 2657 mm; 144mm thickness (each)
Lock: DS 3-Point Lock
Hinge: HD Continuous (stainless steel)
Closer: Dorma HD 8900 Series.
Widow Opening: 254mm x 254mm (10"x10") (maximum)

3). DS H-60 5.5" Door
Leaf Size: 1205 x 2123 mm; 144mm thickness
Lock: DS 3-Point Lock
Hinge: HD Continuous (stainless steel)
Closer: Dorma HD 8900 Series.
Widow Opening: 254mm x 254mm (10"x10") (maximum)

Rating:

H-60 Single Leaf Door - A-60 Fire Integrity Rating, as defined in IMO FTP Code Annex 1 Part 3; H-60 Class fire rating due to successful testing under hydrocarbon fire exposure in lieu of standard fire exposure.
 DS H-60 Pair 5.5" Door - A-60 fire integrity rating, as defined in IMO FTP Code Annex 1 Part 3; H-60 Class fire rating due to successful testing under hydrocarbon fire exposure in lieu of standard fire exposure.
 DS H-60 5.5" Door - A-60 fire integrity rating, as defined in IMO FTP Code Annex 1 Part 3; H-60 Class fire rating due to successful testing under hydrocarbon fire exposure in lieu of standard fire exposure.

Service Restriction:

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

(2) Continued compliance with the statutory requirements requires maintenance of full Type Approval (PDA+MA). The scope of Type Approval is to comply with MSC.1/Circ. 1221 dated 11 December 2006.
(3) The door materials shall not be replaced by materials that have not been tested in accordance with the IMO FTP

(3) The door materials shall not be replaced by materials that have not been tested in accordance with the IMO FTP Code and/or accepted by the Flag Administration.

Comments:

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

(2) Production items are to be manufactured in accordance with a quality control system which shall be maintained to

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ensure that items are of the same standard as per tested/approved prototype.

(3) Production item should be installed/used in accordance with manufacturer's instructions.

(4) Unless specifically directed by Administration, this approval is not to be construed as a substitute for Flag

Administration's approval for the purpose of SOLAS, as amended. This assessment has not been performed on behalf of any flag administration.

(5) All fire doors are to bear a permanent marking to indicate manufacturer's name, door model number and the fire rating it is approved for.

(6) This certificate may not be used for EU and US flagged vessels (MED and/or USCG have their own specific requirements).

(7) Individual review to the intended use on specific vessel, MODU or facility is required.

Notes/Drawing/Documentation:

SWRI Repot No. 01.11812.01.202[1], April 5, 2007 and Deansteel Drawing DS-H003 Rev. 3, October 23, 2009 SWRI Report No. 01.15210.01.601, October 16, 2009 and Deansteel Drawing DS-H004 Rev. 0, October 23, 2009 SWRI Report No. 01.15210.01.606, February 1, 2010 and Deansteel Drawing DS-H005 Rev. 0, October 23, 2009

SWRI Report No. 01.25555.01.071-2001RM1 February 18, 2020

USCG Certificate No. 164-136-81-0 for A-60 Single Leaf Door USCG Certificate No. 164-136-87-0 for DS H-60 5.5 Blast Door USCG Certificate No. 164-136-89-0 for DS H-60 Single 5.5 AND DS H-60 Pair 5.5 Doors

Terms of Validity:

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STANDARDS

ABS Rules:

2021 ABS Rules for Conditions of Classification of Marine Vessels and Structures, 1-1-4/7.7, 1-1-A3, 1-1-A4, in accordance with followings: ABS Rules for Building and Classing Marine Vessels Rules: 3-4-1

2021 ABS Rules for Conditions of Classification of Offshore Units and Structures, 1-1-4/9.7, 1-1-A2, 1-1-A3, in accordance with followings: ABS Rules for Ruliding and Classing Mobile Offshore Units: 5, 1, 1/2, 17:

ABS Rules for Building and Classing Mobile Offshore Units: 5-1-1/3.17;

ABS Rules for Building and Classing Facilities on Offshore Installations: 3-8/9.15, 4-8/9.15.

National:

NA

International:

SOLAS (Consolidated Edition 2020) as amended, Chapter II-2, Regulation 9.4.1.1.2, 9.4.2.1;

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2009 IMO MODU Code (Consolidated Edit 2020), Chapter 1 / 1.3.26 and Chapter 9 / 9.2.4, 9.2.9, and 9.3.1; IMO FTP Code (2012 Edition), Annex 1, Part 1 & 3, entered into force on 1 July 2012.

Government:

USCG Approvals 164.136/81/0 issued July 02, 2017 (expires July 02, 2022); 164.136/89/0 issued June 10, 2020 (expires June 10, 2025), 164.136/87/0 issued October 29, 2019 (expires October 29, 2024).

EUMED: NA

OTHERS:

NA