

CERTIFICATE NUMBER EFFECTIVE DATE **EXPIRY DATE** ABS TECHNICAL OFFICE 22-2215388-PDA 24-Feb-2022 23-Feb-2027 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

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: Fire Retarding Door

Model: Deansteel - B-15 Fire Rated Double Door

Endorsements:

Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 23/Feb/2027 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

David 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: Fire Retarding Door

Model: Deansteel - B-15 Fire Rated Double Door

Endorsements:

Intended Service:

Marine and Offshore Applications - Fire Rated Doors in B-Class Divisions

B-15 fire rated double door

Maximum Door Leaf Size (W x H x T) 908 x 2124 x 45 mm Door: 18 Ga. Steel Skin / filled with 96 kg/cu.m insulation Nominal Clear Opening (W x H) 1797 x 2118 mm Top Panel Maximum Size (W x H) 1830 x 305 mm

Hinges: Three 4 1/2-in standard duty hinges on each leaf

Optional Kick Out Panels (W x H) 508 x 508 mm
Optional Louver Opening (W x H) 407 x 280 mm with net clear opening limited to 300 sq. cm.

Optional Fire Resistant Glass Window Viewable Area (W x H) 254 x 254 mm

Rating:

B-15 Fire Integrity Rating, as defined in IMO FTP Code Resolution MSC.307 (88)), Annex 1, Part 3.

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). Use of louver opening in the kick out panel is governed by the following IMO Regulations: SOLAS II-2 Regulations 9.4.1.2.1, 9.4.2.3 or 2009 IMO MODU Mode Code 9.3.3 as applicable.
- 3). 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.
- 4). 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). Approval not performed on behalf of any Flag Administration.
- 3). The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006. Continued compliance with the statutory requirements requires maintenance of full Type Approval (PDA+MA).
- 4). Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as per tested/approved prototype.
- 5). All door should be installed in accordance with manufacturer's instruction and installation drawings.
 6). 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.
- 7). This certificate may not be used for EU and US flagged vessels (MED and/or USCG have their own specific requirements).
- 8). Individual review to the intended use on specific vessel, MODU or facility is required.
- 9). Door Tested 22 June 2012 as detailed in Southwest Research Institute (SwRI) Final Report of Project No.
- 01.16918.01.612 dated 17 July 2012 and Deansteel Drawings for Job No. 95063.
- 10). Valid Only at Dean Steel Manufacturing Location: San Antonio, TX, USA.

Notes/Drawing/Documentation:

Southwest Research Institute (SwRI) Final Report of Project No. 01 16918 01 612 (Pages: 31) dated 17 July 2012 and Deansteel Drawings for Job No. 95063.

164.136/103/0, USCG Certificate of Approval.

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Document of Conformity HS1488282

Terms of Validity:

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STANDARDS

ABS Rules:

ABS Rules for Conditions of Classification Part 1, Marine Vessel Rules (2022) 1-1-4/7.7, 1-1-A3, 1-1-A4; ABS Rules for Conditions of Classification Part 1, Offshore Units and Structures (2022) 1-1-4/9.7, 1-1-A2, 1-1-A3.

National:

NA

International:

IMO Resolution. A.754 (18): Recommendation on Fire Resistance Tests for "A", "B", and "F" Class Divisions. IMO FTP Code (Resolution MSC.307 (88)), Annex 1, Part 3, entry into force on 1 July 2012.

Government:

Coast Guard Approval Number 164.136/103/0; Issued 21 September 2017; Expires 2 September 2022

EUMED:

NA

OTHERS:

NA