



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

26-0596299-PDA
02-Jun-2026
01-Jun-2031
Houston Offshore Engineering

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: Window, A-60 Fireproof
Model: A-60 IMO Marine Window
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 01/Jun/2031 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: Window, A-60 Fireproof
Model: A-60 IMO Marine Window
Endorsements:

Intended Service:
For use on Ships and Offshore Installations

Description:
Window comprised of Contraflam Marine A60 Insulated Glass Unit, 1476mm x 2029mm, 40mm thick, with a 6mm airspace, in a stainless steel frame that is bolted or welded to the bulkhead.
Maximum visible glass dimensions 1448 mm x 2000 mm.

Rating:
A-60 fire integrity rating, as defined in IMO FTP Code Annex 1 Part 3, including heat flux and hose stream performance criteria.

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) All fire windows are to bear a permanent marking to indicate manufacturer's name, model number and the fire rating it is approved for.
(4) The window 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 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 (Consolidated Edition 2020), as amended.
(5) This assessment has not been performed on behalf of any flag administration.
(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.
(8) In case of installation within external bulkheads of the superstructure/deckhouse the review/approval will be necessary to confirm strength requirements depending on specific location.

Notes/Drawing/Documentation:
SwRI Project No. 01.24102.01.306b, Fire Performance Evaluation of an A-Class Window Assembly in Accordance with Annex 1: Part 3, Test for A, B and F Class Divisions of the IMO FTP Code 2010 (2012 Edition), dated 8 October 2019
USCG Certificate of Approval 164.137/23/0, expires 04 December 2029.

Terms of Validity:
This Product Design Assessment (PDA) Certificate remains valid until 01/Jun/2031 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).

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STANDARDS**ABS Rules:**

2026 Rules for Conditions of Classification, Part 1A, Ships: 1A-1-4/7.7, 1A-1-A3, 1A-1-A4;

2025 Rules for Conditions of Classification, Part 1B, Offshore Units and Structures: 1B-1-4/9.7, 1B-1-A2, 1B-1-A3;

2026 Rules for Building and Classing Marine Vessels: 3-4-1;

2026 Rules for Building and Classing Offshore Units: 5-1-1/3.7, 3.15

National:

NA

International:

SOLAS (Consolidated Edition 2020) as amended, Chapter II-2, Regulation 9.4.1.3

IMO FTP Code - Resolution MSC.307(88) (Adopted 3 December 2010), 2012 Edition (entered into force 1 July 2012), Section 5.2 & Annex 1 Part 3, Appendix 2/A.I Windows including Hose Stream Test and Appendix 3 Thermal Radiation Test Supplement to Fire Resistance Test Procedures for Windows in A, B and F Divisions

Government:

USCG Certificate of Approval 164.137/23/0, expires 04 December 2029

EUMED:

NA

OTHERS:

NA