

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 22-2313860-PDA 07-Dec-2022 06-Dec-2027 London Engineering Department

CERTIFICATE OF Product Design Assessment

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

ROCKWOOL INTERNATIONAL A/S

located at

HOVEDGADEN 584, , DK-2640 HEDEHUSENE, Denmark

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 Protection Bulkhead
Model:	Steel Bulkhead H-120
Endorsements:	
Tier:	3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 06/Dec/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

Karthik Subramanian, 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)

> ROCKWOOL INTERNATIONAL A/S HOVEDGADEN 584 DK-2640 HEDEHUSENE Denmark Telephone: +31 475 353915 Fax: Email: math.mourmans@rockwool.com Web: www.rockwool-rti.com Tier: 3 - Type Approved, unit certification not required

Product:Fire Protection BulkheadModel:Steel Bulkhead H-120Endorsements:

Intended Service:

Insulation Material for Fire Prevention of Bulkheads

Description:

The bulkhead consists of a standard structural steel core insulated with Rockwool insulation. The insulation is fixed to the bulkhead using pins and washers. The insulation on the level is 40 mm Rockwool SeaRox WM 660 (exposed surface), & 50 mm Rockwool SeaRox SL 660. The insulation on the stiffners are 40 mm Rockwool SeaRox WM 660 (exposed surface) & 50 mm Rockwool SeaRox SL 660. The insulation is fixed to the bulkhead with 3mm steel pins and 28mm washer as per customer drawings and instruction manual.

Rating: H-120

Service Restriction:

1. Unit Certification is not required for this product.

2. Continuous compliance with the statutory requirements requires maintenance of the Full Type Approval. The scope of Type Approval is to comply with MSC.1/Cir. 1221 dated 1 December 2006.

3. 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.

Comments:

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

2. Unless specifically directed by the Administration, this approval is not to be construed as a substitute of a flag Administration's approval for the purpose of SOLAS 2020, as amended.

3. In those instances where flag administration may have their own specific requirements, flag Administration's approval may be required.

Notes/Drawing/Documentation:

Tested by Danish Institute of Fire and Security Technology test report No. PG11959 Serial No. 11811 Ref. ABR/DHL Dated 18th December 2008.

To certify the non-combustibility of the mineral wool the following documentation was provided:

Rockwool HC Wired Matt 150: Test report no. PF13007, testing date 2008-11-25,&

Test report no. PF12961b, testing date 2008-09-23, issued by DBI according to IMO Resolution MSC 61(67) Annex 1 Part 1 (IMO Resolution A.799 (19)).

Smoke and/or flame penetration test was carried out according to the demands in IMO Resolution A.754 (18).

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 06/Dec/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).

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STANDARDS

ABS Rules:

ABS Rules for Condition of Classification 2022: 1-1-4/7.7, 1-1-A3 & A4; ABS Rules for Condition of Classification -Offshore Units and Structures 2022: 1-1-4/9.7, 1-1-A2 & 1-1-A3

National:

NA

International:

IMO FTP Code Resolution A.754(18), performance criteria and hydrocarbon time / temperature relationship specified in EN 1363-2 Revalidated in accordance with section 5.2 of IMO Resolution MSC.307(88) (adopted on 3 December 2010) - 2010 FTP Code

Government: NA

NA

EUMED: NA

OTHERS:

NA



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Product Design Assessment

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

ROXUL ROCKWOOL INSULATION INDIA PVT.

LTD.

located at

PLOT Z/4 DAHEJ SEZ, , DAHEJ, DISTRICT BHARUCH, GUJARAT, India, 392130

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 Protection Bulkhead
Model:	Steel Bulkhead H-120
Endorsements:	
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> ROXUL ROCKWOOL INSULATION INDIA PVT. LTD. PLOT Z/4 DAHEJ SEZ DAHEJ, DISTRICT BHARUCH GUJARAT India 392130 Telephone: +91 610835284 Fax: Email: lukas.Vonsik@rockwool.com Web: www.rockwool-searox.com **Tier: 3 - Type Approved, unit certification not required**

Product:Fire Protection BulkheadModel:Steel Bulkhead H-120Endorsements:

Intended Service:

Insulation Material for Fire Prevention of Bulkheads

Description:

The bulkhead consists of a standard structural steel core insulated with Rockwool insulation. The insulation is fixed to the bulkhead using pins and washers. The insulation on the level is 40 mm Rockwool SeaRox WM 660 (exposed surface), & 50 mm Rockwool SeaRox SL 660. The insulation on the stiffners are 40 mm Rockwool SeaRox WM 660 (exposed surface) & 50 mm Rockwool SeaRox SL 660. The insulation is fixed to the bulkhead with 3mm steel pins and 28mm washer as per customer drawings and instruction manual.

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Government:

NA

EUMED: NA

OTHERS:

NA