Certificate Number: 17-HS1697682-PDA 09/MAR/2018



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 09-JAN-2023. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Fire Retarding Deck Model Name(s): Dex-O-Tex Insul-Dex A-60 Rated Deck Underlayment

Presented to:

CROSSFIELD PRODUCTS CORP. 3000 E. HARCOURT STREET CA 90221 **United States**

Intended Service: Marine & Offshore Application - Fire rated A-60 cementitious deck covering for

ships and offshore facilities.

Description: Deck Assembly (IMO) A-60, a trowel applied calcium aluminate cementitious

> compound consisting of the Insul-Dex Bondcoat Paste and Insul-Dex Basecoat applied to a minimum thickness of 1-3/8 inches (35 mm) as an insulating deck underlayment for use under tile, carpet, terrazzo and comparable overlays.

Tier:

Ratings: Material is non-combustible in accordance with IMO FTP Code 2010 (Res.

> MSC.307(88)) Part 1 of Annex 1 (entered into force 1 July 2012). Material meets A-60 Deck criterion in accordance with IMO FTP Code 2010 (Res. MSC.307(88) Part 3 of Annex 1 (entered into force 1 July 2012). Minimum thickness as A-60 fire

rated deck underlayment: 35 mm (1-3/8 inches) over A-Class steel deck

Service Restrictions: 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. The material is not designed as a finished surface.

Comments: - The Manufacturer has provided a declaration about the control of, or the lack of

Asbestos in this product. - Approval not performed on behalf of any flag

Administration. - The scope of the Type Approval is to comply with MSC.1/Circ.

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1221 dated 11 December 2006. - 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 tested/approved prototype. - Product should be installed/used in accordance with manufacturer's instructions.

Notes / Documentation:

SWRI Test Report Project No. 01.21604.01.103a, Fire Performance Evaluation in accordance with 2010 IMO FTP Code Part 1, Non-Combustibility Test, dated January 6, 2017, 8 Pages. SwRI Test Report Project No. 01.21601.01.305a[1], Fire Performance Evaluation of a Cementitious Class A Deck Covering Tested in the Deck Orientation in accordance with the 2010 IMO FTP Code, Part 3, Test for A, B, and F Class Divisions, Revision 1 (October 3, 2017), 64 Pages.

Term of Validity:

This Product Design Assessment (PDA) Certificate 17-HS1697682-PDA, dated 10/Jan/2018 remains valid until 09/Jan/2023 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules:

ABS Rules for Conditions of Classification, Part 1 (2017 Steel Vessels Rules) 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2018 ABS Steel Vessel Rules 3-4-1 ABS Rules for Conditions of Classification, Part 1 – 2017 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following: 2018 ABS Mobile Offshore Drilling Units Rules 5-1-1/3.5 and 5.21

National Standards:

International Standards: 2010 IMO FTP Code, Annex 1, Part 1, Non-Combustibility Test (adopted on 3

December 2010) 2010 IMO FTP Code, Annex 1, Part 3, Test for A, B, and F Class

Divisions (adopted on 3 December 2010)

Government Authority: US Coast Guard Approval Number: 164.105/13/0: Issued 23 August 2017, Expires:

23 August 2022. Transport Canada TP 14612E (3rd Edition, May 2011, Chapter 2).

EUMED: Others:

Model CertificateModel Certificate NoIssue DateExpiry DatePDA17-HS1697682-PDA20-JAN-201809-JAN-2023

ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.