Certificate Number: 15-HS1456434-PDA 22/APR/2019



## 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 21-DEC-2020. 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: FRP Grating Model Name(s): Fibergrate Molded Grating: Corvex

## **Presented to:**

FIBERGRATE COMPOSITE STRUCTURES P.O. BOX 208 900 FM 205 TX 76401 United States

| Intended Service:     | Marine & Offshore Application - for Personnel Walkways, Catwalks Ladders,<br>Platforms, or other access areas in Cargo Holds, Cargo Tanks, Fuel Oil Tanks,<br>Ballast Water Tanks, Cofferdams, Void Spaces Double Bottoms, Pipe Tunnels &<br>Open Deck Spaces.  |
|-----------------------|---|
| Description:          | Corvex Fiber Reinforced Grating   |
| Tier:                 | 3   |
| Ratings:              | Tested for surface burning characteristics as per ASTM E84-05 to have a flame spread index of less than or equal to 25.   |
| 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. Not to be used as Walkways or Areas which may be used for Escape, or Access for Firefighting, Emergency Operation or Rescue. These products are not approved for use in L1, L2, or L3 locations as outlined by the USCG Policy File Memorandum 2-98, unless additional testing and subsequent approval demonstrates otherwise. This Product is not to be used in Cargo Tanks, Fuel Oil Tanks, Ballast Water Tanks, Cofferdams, Void Spaces, Double Bottoms, Pipe Tunnels, etc. which are normally accessed when underway; see USCG PFM 2-98 for additional Guidance. |

|   | Model Certificate No   | Issue Date  | Expiry Date  |  |
|---|--|---|--|--|
| EUMED:<br>Others:                                 |  |   |  |  |
| International Standards:<br>Government Authority: | USCG PFM 2-98, Policy File Memorandum on the use of Fiber Reinforced Plastic Grating & Cable Trays.  |   |  |  |
| National Standards:                               | 2005 ASTM E-84-05 "Standard Test Method for Surface Burning Characteristics"   |   |  |  |
| ABS Rules:  | 2015 Steel Vessels Rules 1-1-4/7.7; 1-1-Appendix 3, 1-1-Appendix 4; 2015 Mobile<br>Offshore Drilling Units 1-1-4/9.7, 1-1-Appendix 2, 1-1-Appendix 3; 2015 Rule for<br>Building & Classing Facilities on Offshore Installations 1-1-4/9.7, 1-1-Appendix 2,<br>1-1-Appendix 3.  |   |  |  |
| Term of Validity:                                 | This Product Design Assessment (PDA) Certificate 15-HS1456434-PDA, dated 22/Dec/2015 remains valid until 21/Dec/2020 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. |   |  |  |
| Notes / Documentation:                            | <ol> <li>Fibergrate Composite Structures, Fiberglass Molded Products Brochure. 2.</li> <li>ASTM E-84, Commercial Testing Company Report 14-06426 Dated: 6/27/2014 3.</li> <li>Shanghai Saige Composites Materials Co.,LTD., Fiberglass Molded Grating Detail</li> <li>Intertek Testing Service NA, Inc., Report No. 3176710SAT-001 A, ASTM</li> <li>E-84-09 Test for Surface Burning Characteristics of Building Materials "SGMFR"</li> </ol>  |   |  |  |
| Comments:   | QUERETARO. The Manufa  | Corgrate Fiberglass Sy<br>acturer has provided a de | stems SA De CV (164468) -<br>eclaration about the control of<br>t performed on behalf of any |  |

**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.