



Confirmation of Product Type Approval

Company Name: CORGRATE FIBERGLASS SYSTEMS, S.A. DE C.V.

Address: AVENIDA DE LAS MISIONES #21 PARQUE INDUSTRIAL BERNARDOQUINTANA
ARRIOJA TERCERA ETAPA EL MARQUES QUERETARO QUERETARO 76240 Mexico

Product: FRP Grating

Model(s): Fibergrate FRP Composite Grating, Model: I4015, I5015, I5515, I6015.

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	23-2442612-PDA-DUP	05-DEC-2023	04-DEC-2028
Manufacturing Assessment (MA)	25-7177218	05-SEP-2025	04-SEP-2030
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

Marine and Offshore application in walkways, catwalks, ladders, platforms or access areas in Open Decks, Semi-enclosed areas, Ballast Water Tanks, Cofferdams, Void Spaces, Double Bottoms, Pipe tunnels as authorized in the ABS Marine Vessel Rules 3-4-A1 or ABS Mobile Offshore Unit Rules 5-3-A1.

Description

Fibergrate FRP Composite Grating, Model: I4015, I5015, I5515, I6015.

Ratings

Flame Spread and Smoke Generation per ASTM F3059 (Section 16)

Structural Fire Integrity per ASTM F3059 (Section 17) Level 2 (L2), Level 3 (L3) and Level 0 (L0):

Level 2 (L2) FRP gratings meeting the L2 performance criteria are intended for use in areas in which personnel may need to assemble after the grating has been exposed to a fire and are tested to ensure that they will be able to sustain a post-fire structural loading. Areas in which L2 gratings are specified include temporary safe refuge or lifeboat embarkation stations. Level 2 gratings may also be used in any areas requiring Level 3 gratings.

Level 3 (L3) FRP gratings meeting the L3 performance criteria are intended for use in areas used as egress routes or that may require access for firefighting, emergency operations, or rescue during or shortly after exposure to a very limited fire not likely involving flammable liquids.

Level 0 (L0) FRP gratings tested to Test Method E84 with a flame spread index no more than 20 and a smoke-developed index no more than 450. L0 FRP gratings have no level of fire integrity. L0 gratings

are used for personnel walkways, catwalks, ladders, platforms, or access areas in cargo holds and tanks.

Please refer to ABS Marine Vessels Rules 3-4-A1 or ABS Mobile Offshore Units Rules 5-3-A1 (ABS Facilities Rules A3) for locations and applications acceptable for FRP gratings.

Service Restrictions

- 1). Unit Certification is not required for this product. If the manufacturer or purchaser's 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). ABS Marine Vessels Rules 3-4-A1 or ABS Mobile Offshore Units Rules 5-3-A1 (ABS Facilities Rules A3) identifies the locations and the applications acceptable for FRP gratings.
- 3). Not to be used for all personnel walkways, catwalks, ladders, platforms, or access areas in Cargo Tanks and Fuel Oil Tanks which are normally entered when underway.
- 4). Not applicable to accommodations, service spaces, control stations, and machinery spaces.
- 5). Not intended to use in Drill floor and Hydrocarbon processing/production areas where hydrocarbon fires are expected. Refer to Comment #6.
- 6). Maximum bearing bar spacing is 1.5 inches on center to center, and maximum unsupported span is 44 inches.
- 7). Maximum deflection is 1/4 inch with a minimum load of 150 PSF for the maximum unsupported span.
- 8). Allowable open area spacing is from 40% up to 60% depending on model.

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 (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). Grating was tested to meet ASTM F3059 Section 8 through Section 17.
- 6). Grating is complied with the L2 fire resistance requirements of intact (pre-fire) testing (flame spread, smoke generation) as addressed in ASTM F3059, along with post fire testing, center load test, and uniform load test. Furnace controls shall be in accordance with Test Methods ASTM E119 as indicated in Section 17.3 of ASTM F3059. If grating is damaged by any hydrocarbon fires, the damaged grating shall be strictly restricted to access by personnel until replaced with new gratings.
- 7). Individual review to the intended use on specific vessel, MODU or facility is required.
- 8). This certificate may not be used for EU and US flagged vessels/Facilities (MED and/or USCG have their own specific/requirements), unless otherwise specially considered.
- 9). Unless specially directed by Administration, this approval is not to be construed as a substitute for Flag Administration's approval for the purpose of SOLAS and/or IMO MODU Code, as amended/updated.

Notes, Drawings and Documentation

- 1). Intertek Test Report No. P3946.01-106-31, Fibergrate Test Report for ASTM F3059-18 - Sections 8, 9, 10, 11 and 15, Test Dates: 11/01/22 - 11/18/22, Issue Date: 12/21/22, Revision: 0, Pages: 21.

- 2). Intertek Test Report No. P220921011SHF-001, Fibergrate Test Report for ASTM F3059-18 - Sections 12, 13 and 14, Test Dates: 09/06/2022 - 10/17/2022, Issue Date: 10/21/22, Revision: Sep. 01, 2022, Pages: 7.
- 3). Intertek Test Report No. 104962836SAT-014D, Fibergrate Test Report for ASTM F3059-18 - Section 16, Test Date: 09/01/2022, Issue Date: 09/07/2022, Revision: 0, Pages: 11.
- 4). Intertek Test Report No. 104962836SAT-017, Fibergrate Test Report for ASTM F3059-18 - Section 17, Test Dates: 06/21/2022 - 06/22/2022, Issue Date: 06/24/2022, Revised Date: 01/12/2023, Revision: 1, Pages: 23.
- 5). Drawing No. B-03657, Rev. 0, I4015 Phenolic Grating (Sht. 1 of 4).
- 6). Drawing No. B-03657, Rev. 0, I5015 Phenolic Grating (Sht. 2 of 4).
- 7). Drawing No. B-03657, Rev. 0, I5515 Phenolic Grating (Sht. 3 of 4).
- 8). Drawing No. B-03657, Rev. 0, I6015 Phenolic Grating (Sht. 4 of 4).
- 9). Intertek 70101 - Listing Information of Fibergrate -Firewalk Safet-T-Span Pultruded Grating.

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 04/Dec/2028 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.

ABS Rules

Rules for Conditions of Classification, Part 1 - 2023 Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4; 3-4-A1;

Rules for Conditions of Classification, Part 1 - 2023 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2023 Mobile Offshore Units 5-3-A1;

2023 Facilities on Offshore Installations Appendix 3;

International Standards

NA

EU-MED Standards

NA

National Standards

ASTM F3059-18 - Standard Specification for Fiber-Reinforced Polymer (FRP) Gratings Used in Marine Construction and Shipbuilding.

ASTM E84-21a - Standard Test Method for Surface Burning Characteristics of Building Material.

Government Standards

USCG Coast Guard CG-ENG Policy Letter 01-18: Equivalency Determination-FRP Gratings Conforming to ASTM F3059

Other Standards

NA



A handwritten signature in black ink, appearing to read "James W. White".

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 19-Mar-2026 2:48

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 is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. 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.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

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.

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.