## U. S. Department of Homeland Security United States Coast Guard

## Certificate of Approval

Coast Guard Approval Number: 164.040/16/0

Expires: 06 July 2019

FIBER REINFORCED PLASTIC GRATING

STRONGWELL CHATFIELD DIVISION 1610 HIGHWAY 52 SOUTH CHATFIELD, MN 55923-9799

Duragrid ASTA F3059 38mm and 45mm phenolic fiber reinforced plastic (FRP) gratings approved as meeting structural fire integrity Level 2 (L2) and surface flammability requirements of ASTM F3059-15.

Each pultruded grating model has a maximum unsupported span of 1118 mm (44 in) and a maximum bearing bar spacing of 38.1 mm (1.5 in) on center. Duragrid 38mm has a bearing bar thickness of 38.1mm (1.5 in), and Duragrid 45 mm has a bearing bar thickness of 45mm (1.77 in).

U.S. Coast Guard NVIC 9-97 CH.1 identifies the locations and the applications acceptable for FRP gratings.

Identifying Data: USCG letter dated September 13, 2016. Strongwell letters dated May 2 and May 5, 2016. For Duragrid 38mm only: Intertek Project Nos. 102299027SAT-003A dated November 25, 2015 (ASTM F3059-15 Section 17) and 102429778SAT-003A/B Rev 1 dated February 5, 2016 (ASTM F3059-15 Section 16). For Duragrid 45mm only: SwRI Project No. 01.14431.01.309 dated February 18, 2009 (ASTM F3059-15 Section 17). SwRI Project No. 01.14430.01.084b dated February 17, 2009 and Intertek Project No. 102337218SAT-001A November 12, 2015 (ASTM F3059 Section 16).

All Duragrid 38mm and 45mm FRP grating reinforcements, resins, adhesives, and construction details are as indicated in the Follow-up Procedure Document, SwRI Project No. 01.25000.02.184 Revision 2, issued July 2016.

Follow-up Program: SwRI.

Manufacturing location: 1610 Highway 52 South, Chatfield, MN, USA. Valid only for products manufactured at the above location.

This certificate supersedes approval number 164.040/16/0 dated July 6, 2014, to reflect ASTM F3059-15 testing and to remove reference to the Duragrid 1.5 inch G33-JM grating model.

\*\*\* End \*\*\*

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.



GIVEN UNDER MY HAND THIS 13<sup>th</sup> DAY OF SEPTEMBER 2016, AT WASHINGTON D.C.

B. A. BALDWIN Chief, Lifesaving and Fire Safety Division BY DIRECTION OF THE COMMANDANT TERMS: The approval of the item described on the face of the Certificate has been based upon the submittal of satisfactory evidence that the item complies with the applicable provisions of the navigation and shipping laws and the applicable regulations in Title 33 and/or Title 46 of the Code of Federal Regulations. The approval is subject to any conditions noted on this Certificate and in the applicable laws and regulations governing the use of the item on vessels subject to Coast Guard inspection or on other vessels and boats.

Consideration will be given to an extension of this approval provided application is made 3 months prior to the expiration date of this Certificate.

The approval holder is responsible for making sure that the required inspections or tests of materials or devices covered by this approval are carried out during production as prescribed in the applicable regulations.

The approval of the item covered by this certificate is valid only so long as the item is manufactured in conformance with the details of the approved drawings, specifications, or other data referred to. No modification in the approved design, construction, or materials is to be adopted until the modification has been presented for consideration by the Commandant and confirmation received that the proposed alteration is acceptable.

NOTICE: Where a manufacturer of safety-at-sea equipment is offering for sale to the maritime industry, directly or indirectly, equipment represented to be approved, which fails to conform with either the design details or material specifications, or both, as approved by the Coast Guard, immediate action may be taken to invoke the various penalties and sanctions provided by law including prosecution under 46 U.S.C. 3318, which provides:

"A person that knowingly manufactures, sells, offers for sale, or possesses with intent to sell, any equipment subject to this part (*Part B. of Subtitle II of Title 46 U.S.C.*). and the equipment is so defective as to be insufficient to accomplish the purpose for which it is intended, shall be fined not more than \$10,000, imprisoned for not more than 5 years or both."