



## Confirmation of Product Type Approval

**Company Name:** STRONGWELL

**Address:** 400 COMMONWEALTH AVE.P.O. BOX 580 VA 24203 United States

**Product:** FRP Grating

**Model(s):** DURAGRATE®, 1", 1.5" & 2" Molded Fiberglass Grating

<b>Certificate Type</b>	<b>Certificate Number</b>	<b>Issue Date</b>	<b>Expiry Date</b>
Product Design Assessment (PDA)	20-1975433-PDA	14-APR-2020	13-APR-2025
Manufacturing Assessment (MA)	20-JE4161033	27-FEB-2020	26-FEB-2025
Product Quality Assurance (PQA)	NA	NA	NA

### **Tier**

3

### **Intended Service**

Marine and Offshore Installations - Personnel Walkways, Catwalks, Ladders, Platforms or Access Areas in Cargo Holds, Cargo Tanks, Fuel Oil Tanks, Ballast Water Tanks, Cofferdams, Void Spaces, Double Bottoms, Pipe Tunnels, Open Decks and Semi-Enclosed Areas.

### **Description**

DURAGRATE® is comprised of fiberglass rovings combined with a choice of thermosetting resin systems. DURAGRATE grating panels are molded in one piece, with a plain concave non-slip walking surface.

DURAGRATE® grating is supplied in 12 standard panel sizes: 3-, 4- and 5-foot widths, in each of 8-, 10- and 12-foot lengths. Custom sizes are available upon request.

DURAGRATE® resin codes (resin bases) are VE (Vinyl Ester), NVE (Vinyl Ester), XVE (Vinyl Ester), PP (Isophthalic polyester), NPP (Isophthalic polyester), GP (Orthophthalic polyester), and FF (Isophthalic polyester).

### **Ratings**

Thickness 1", 1 1/2" or 2".

Flame Spread Rating of 25 or less: DURAGRATE® (GP)

### **Service Restrictions**

1) 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.

2) DURAGRATE GP may only be used in Applications requiring No Structural Fire Integrity as set forth in the USCG PFM 2-98 and Appendix 3. These Areas are limited to Personnel Walkways,

Catwalks, Ladders, Platforms or Access Areas in Cargo Holds, Cargo Tanks, Fuel Oil Tanks, Ballast Water Tanks, Cofferdams, Void Spaces, Double Bottoms, Pipe Tunnels, Open Decks and Semi-Enclosed Areas as set forth in the USCG PFM Structural Fire Integrity Matrix and Appendix 3.

3) All other DURAGRATE grating resins may be used only where there are No Flame Spread and/or Smoke developed requirements according to the USCG PFM 2-98 and Appendix 3. Consult the USCG PFM Structural Fire Integrity Matrix and Appendix 3 for additional information as to Location and Intended Service.

4) The product is not to be used in areas where L1, L2 or L3 rated FRP grating are required per ABS Rules for Building and Classing Facilities on Offshore Installations.

### **Comments**

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

2) This approval was not done on behalf of a particular Administration.

3) USCG Marine Safety Manual, Vol. II, Para. 5.C.6 (from USCG PFM 2-98, Policy File Memorandum on the use of fiber reinforced plastic gratings & cable trays)

### **Notes, Drawings and Documentation**

Drawing No. Correspondence, Declaration of Conformance, Revision: 1, Pages: -

Drawing No. 545489-00\_0(1), Purchase Order, Revision: 1, Pages: -

Drawing No. Correspondence, Email Quote, Revision: 1, Pages: -

Drawing No. Correspondence, PDA Application, Revision: 1, Pages: -

Drawing No. SGS U.S. Testing Company Inc. Report 168985 dated July 25, 2002, Revision: -, Pages: -

Drawing No. DURAGRATE-Brochure, Revision: -, Pages: 8

### **Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 13/Apr/2025 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**

The Rules for Conditions of Classification, Part 1 2020 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3, 1-1-Appendix 4.

The Rules for Conditions of Classification, Part 1 2020 – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2020 Facilities on Offshore Installations Appendix 3/1, 3, 5.3, 5.5.1, 5.7.1, 9.

### **International Standards**

NA

### **EU-MED Standards**

NA

**National Standards**

ASTM E84 (2020) "Standard Test Method for Surface Burning Characteristics of Building Materials".

**Government Standards**

NA

**Other Standards**

NA



A handwritten signature in black ink, appearing to read 'James J. White'.

Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 09-Jun-2020 2:49

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.