



Certificate no.:
TAF0000217

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **FRP Grating**

with type designation(s)

FRP MOLDED PHENOLIC GRATING-FIRE RESISTANT, MODEL Type: WMP-HD-15X

issued to

Jiangsu Golden Composites Co., Ltd.

Jingjiang City, Jiangsu Province, China

is found to comply with

DNV offshore standards

DNV rules for classification – Ships

DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021

Application:

For use in locations according to enclosed Structural Fire Integrity Matrix.

Application is to be considered and accepted for each case/project.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2025-12-04**

This Certificate is valid until **2030-12-03**.

for **DNV**

DNV local unit: **Jiangyin NB & CMC**

Approval Engineer: **Timo Linn**

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

FRP MOLDED PHENOLIC GRATING-FIRE RESISTANT, MODEL WMP-HD-15X, tested in red colour, coated and uncoated with top grid.

Max. dimensions: 1506 mm long x 4421 mm wide x 38 mm thick
Max mesh size: 37.4 x 152.4mm

This certificate covers the following grating types with achieved structural fire integrity level according to ASTM F3059-24:

Grating type	Resin	Structural Fire Integrity Level	Flame Spread Index (ASTM E84)	Smoke Developed Index (ASTM E84)
MODEL WMP-HD-15X (Top Grid side of flame)	Phenolic	L3, L2, L0	0	0

Application/Limitation

The FRP (GRP) grating is only evaluated in accordance with fire technical requirements. Other requirements such as strength etc. has to be evaluated in each case.

The unsupported span of the gratings during the test was 44 in. long

With reference to below Structural Fire Integrity Matrix (ASTM F3059-24) the grating is only approved for use in locations where L3, L2 and L0 is acceptable.

Structural Fire Integrity Matrix (ASTM F3059-24):

Location	Service	Fire Integrity
Machinery Spaces	Walkways or areas which may be used for escape, or access for firefighting, emergency operation or rescue	L1 _A
	Personnel walkways, catwalks, ladders, platforms or access areas other than those described above	L3
Cargo Pump Rooms	All personnel walkways, catwalks, ladders, platforms or access areas	L1
Cargo Holds	Walkways or areas which may be used for escape, or access for firefighting, emergency operation or rescue	L1
	Personnel walkways, catwalks, ladders, platforms or access areas other than those described above	L0
Cargo Tanks	All personnel walkways, catwalks, ladders, platforms or access areas	L0 _B
Fuel Oil Tanks	All personnel walkways, catwalks, ladders, platforms or access areas	L0
Ballast Water Tanks	All personnel walkways, catwalks, ladders, platforms or access areas	L0
Cofferdams, void spaces, double bottoms, pipe tunnels, etc.	All personnel walkways, catwalks, ladders, platforms or access areas	L0 _C
Accommodation, service, and control spaces	All personnel walkways, catwalks, ladders, platforms or access areas	Not permitted
Lifeboat embarkation or temporary safe refuge stations in open deck areas	All personnel walkways, catwalks, ladders, platforms or access areas	L2
Open Decks or semi-enclosed areas	Operational areas and access routes for deck foam firefighting systems on tank vessels	L2

	Walkways and areas that may be used for escape, or access for firefighting systems and AFFF hose reels, emergency operation, or rescue on MODUs and production platforms including safe access to tanker bows	L2 _D
	Walkways or areas that may be used for escape or access for firefighting, emergency operation or rescue other than those used above	L3
	Personnel walkways, catwalks, ladders, platforms or access areas other than those described above	L3
	Gangway for safe access to bow on tankers according to IMO MSC.62(67)	L2 _E
Footnote: A. If machinery space does not contain any internal combustion machinery, other oil burning, oil heating or oil pumping units, fuel oil filling stations, or other potential hydrocarbon fire sources and has not more than 2.5 kg/m ² of combustible storage, gratings of L3 integrity may be used in lieu of L1. B. Gratings that are electrically conductive shall be required. Acceptance criteria for resistance per unit length and to earth is: < 0.1 M Ω to earth. Test standard ASTM D257-91, ref. DNV-CP-0070 "Fibre reinforced thermosetting plastic piping systems - Non-metallic materials". C. For passenger ships required to meet the safe return to port regulations, MSC.1/Circ.1369 Interpretation No. 8 to be specially considered to determine if it is a space in which the risk of a fire originating is negligible or not. D. Tested with furnace temperature curve according to ASTM E119 (i.e. not tested for Hydrocarbon or Jet fire exposure). E. Also required to be tested according to IMO 2010 FTP Code Part 5 and 2 for floor covering (IMO MSC.1/Circ.1504).		

Each product is to be supplied with its manual for installation and maintenance.

Type Approval documentation

Certification in accordance with Class Programme DNV-CP-0338, September 2021.

-Test report No. 106081341SAT-001A REV 1 dated 6 June 2025 from Intertek, Texas, USA. (WMP-HD-15X Top Grid side of flame), ASTM-3059-Section 16.

-Test report No. 106081341SAT-001B REV1 dated 6 June 2025 from Intertek, Texas, USA. (WMP-HD-15X Bottom non-grid side), ASTM-3059-Section 16.

-Test report No. G106081341SAT-002 R1 dated 05 March 2025 from Intertek, Texas, USA. (WMP-HD-15X Surface smooth, no paint), ASTM-3059-Section 17.

-Test report No. 241029008SHF-006-R1 dated 03 June 2025 from Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch (WMP-HD-15X gritted, paint) ASTM-3059-Section 8.

-Test report No. 241029008SHF-002-R1 dated 03 June 2025 from Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch (WMP-HD-15X gritted, paint) ASTM-3059-Section 11.

-Test report No. 241029008SHF-003-R1 dated 03 June 2025 from Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch (WMP-HD-15X gritted, paint), ASTM-3059-Section 12.

-Test report No. 241029008SHF-004-R1 dated 03 June 2025 from Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch (WMP-HD-15X without and with grit), ASTM-3059-Section 13 and Section 14.

-Test report No. AJFTS25003134R01_EN dated 09 June 2025 from SGS-CSTC Co. Ltd, China. (WMP-HD-15X, FTP Code Part 5).

Drawings:

-Drawing No. WMP-0004 dated 19 October 2024 from Jiangsu Golden Composites Co.,Ltd (WMP-HD-15)

Tests carried out

Tested according to ASTM F3059 and ASTM E84.

Tested according to IMO 2010 FTP Code Part 5 and Annex 2 item 2.2 and item 2.3

Marking of product

Each FRP grating shall be marked as a minimum with the brand and the appropriate fire rating (L1, L2, L3 or L0). The label shall be moulded into the grating or included on a permanently attached label.

Periodical assessment



Job ID: **262.1-042913-1**
Certificate no.: **TAF0000217**

DNV surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNV-CP-0338, Section 4.

Manufactured by:

Jiangsu Golden Composites Co., Ltd., Jingjiang City, Jiangsu Province, China