Certificate No:
TAF00001R5

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class H Fire Wall and Bulkhead

with type designation(s)
Jotachar JF750 XT - Bulkhead

Issued to
Jotun A/S
SANDEFJORD, **Norway**

is found to comply with
DNV offshore standards

Application :

Approved for use as fire retarding bulkhead of class H-0, H-60 and H-120.

Restricted application: Fire against insulated side

Issued at **Høvik** on **2023-05-31**
This Certificate is valid until **2028-05-30**.
DNV local station: **East & South Norway CMC**

Approval Engineer: **Kristin Grønnæss Hovden**

for **DNV**

Jowita Permoda
Head of Section

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 300,000 USD.

Product description

"Jotachar JF750 XT" – Bulkhead
Composed of a structural steel bulkhead insulated on the exposed side. The system is composed of a two-part epoxy primer ("Muki EPS") covered by a two-part epoxy intumescent coating ("Jotachar JF750 XT").

Table 1: H-bulkhead rating and corresponding thickness of "Jotachar JF750 XT"

Rating	DFT [mm]	Comment
H-0	2.0	No temperature limit
H-0_{400}	9.3	Max. temperature rise of 400 ºC (single) after 120 min
H-60	11.5	Max. temperature rise of 140 ºC / 180 ºC (avg. / single) after 60 min
H-120	16.3	Max. temperature rise of 140 ºC / 180 ºC (avg. / single) after 120 min

The materials are manufactured at the following location:

- Jotun Paints (Europe), Ltd., Stather Road Flixborough, Scunthorpe North Lincolnshire DN15 8RR England.
- Chokwang Jotun Ltd, 96, Gwahaksandan, 1-ro, Gangseo-gu, Busan, 46742, Korea.

Application/Limitation

Approved for use as fire retarding bulkhead of class H-0, H-0_{400}, H-60 and H-120.

Restricted application: Fire against insulated side

The protective coating is not defined as non-combustible and should not be used in accommodation or in enclosed areas.

Mass density of "Jotachar JF750 XT":
Spray: 0.98 g/cm^3
Manual: 1.28 g/cm^3

All tests have been performed with nominal dry film thickness (DFT). Workmanship is subject for acceptance by the relevant authority of the project.

The application (spray and/or trowel) of the protective coating is to be performed in accordance with the manufacturer's application manual. Alternative primers and topcoats may be used provided they have been tested and approved by the manufacture.

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

Type Approval documentation

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

Application Guide "Jotachar JF750 XT" dated 16 September 2022.

Test report No. WA052-3 (ii) TR0 dated 29 June 2022 from TBWIC, Dubai, UAE.
Test report No. WA052-4 (ii) TR0 dated 29 June 2022 from TBWIC, Dubai, UAE
Test report No. 518313/R Issue 1 dated 1 September 2022 from Warringtonfire, Warrington, UK.

Assessment report No. PFPS-PAR-2129C Rev. 3 dated 8 February 2023 from PFP, Suffolk, UK.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3 with furnace temperature following the hydrocarbon curve according to EN 1363-2:1999.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

Periodical assessment

DNV's 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.