DNV·GL

Certificate No:
TAF000012H

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class H Fire Wall and Bulkhead

with type designation(s)
THERMO-LAG 2000 - Bulkhead

Issued to
Carboline Company
Saint Louis, MO, USA

is found to comply with
DNV GL offshore standards

Application :

Approved for use as fire retarding bulkhead of class H-60.

Restricted application: Fire against insulated side

Issued at **Høvik** on **2019-01-18**

This Certificate is valid until **2024-01-17**.
DNV GL local station: **Houston**

Approval Engineer: **Helge Bjørnarå**

for **DNV GL**

Digitally Signed By: Schei-Nilsson, Mårten
Location: DNV GL Høvik, Norway

Mårten Schei-Nilsson
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.

Product description

"THERMO-LAG 2000" – Bulkhead (H-60)
composed of a steel bulkhead insulated on exposed side with an epoxy based intumescent coating system "Thermo-Lag 2000", reinforced with carbonic fabric mesh or steel wire mesh fixed with pins.

Table 1: H-deck rating and corresponding thickness of "THERMO-LAG 2000":

Rating	DFT	Comment
H-60	6,0 mm	Max temperature rise of 140 ºC / 180 ºC (avg. / single) after 60 min

The materials are manufactured at the following locations:

- Carboline Company, Dayton, Navada, USA
- Carboline Company, Lake Charles, Louisiana, USA

Application/Limitation

Approved for use as fire retarding bulkhead of class H-60.

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.

The approval refers only to the fire resistance properties of the system.

The application 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 DNVGL-CP-0338, September 2018.

Test Report No. 98736 dated 17 August 1995 from Omega Point Laboratories, USA.
Test Report No. 98737 dated 17 August 1995 from Omega Point Laboratories, USA.
Test Report No. 98804 dated 8 August 1995 from Omega Point Laboratories, USA.

Letter from Omega Point Laboratories Inc., USA dated 19 March 2004.

Tests carried out

In compliance with IMO Resolution A.517(13) and subjected to fire tests with furnace temperature following the hydrocarbon curve specified in ISO 834-3.

Marking of product

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

Periodical assessment

DNV GL'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 DNVGL-CP-0338, Section 4.