

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Horizontal Class B Division**with type designation(s)
STACO-C-B25

Issued to

STACO Co., Ltd.
Busan, Republic of Korea

is found to comply with

DNV GL offshore standards**DNV GL rules for classification – Ships****DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations****Application :****Approved for use as a horizontal fire retarding division of class B-0.****This certificate is recognized by Transport Canada.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2020-03-20**This Certificate is valid until **2025-03-19**.for **DNV GL**DNV GL local station: **Busan**Approval Engineer: **Tessa Bieber**

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

"STACO-C-B25"

consisting of insulating ceiling panels suspended below the structural deck. The panels are composed of 25 mm rockwool (Byucksan Co. Ltd. Korea), of density 80 kg/m³, covered with 0.6 mm galvanized steel sheet on exposed side.

In the longitudinal direction the panels are joined by an overlapped section of the 0,6 mm steel sheets, screwed to each other. In the short ends the panels are joined by a 0,6 mm thick, in total 130 mm wide, steel joining panel.

Max. width of panels: 300 mm.
Total thickness of panels: 25 mm.

"Hanger type":

In the longitudinal direction, the following measures applies:

- Max. distance between modular carrier: 1400 mm.
- Max. distance from bulkhead to the first modular carrier: 300 mm.
- Max. distance from a joining panel to the nearest hanger set: 300 mm.

In the transverse direction, the following measures applies:

- Max. distance from bulkhead to the first hanger: Appr. 600 mm.
- Max. distance between hanger sets: Appr. 1200 mm.

"No hanger type" with less number of hangers than the above type:

In the longitudinal direction, the following measures applies:

- Max. distance between modular carrier: 1400 mm.
- Max. distance from bulkhead to the first modular carrier: 300 mm.
- Max. distance from a joining panel to a modular carrier: 300 mm.
- Max. distance between hanger sets along the cross runner: 2500 mm

In the transverse direction, the following measures applies:

- Max. distance between cross runners: Appr. 1350 mm.

For further details, see the drawing and test report listed under Type Approval documentation below.

Application/Limitation

Approved for use as a horizontal fire retarding division of class B-0.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code parts 2 and 5) when required according to relevant rules and regulations.

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

Type Approval documentation

Certification in accordance with Class Program DNVGL-CP-0338, September 2018.

"Hanger type":

Test report No. KOMERI-0402-12T761 dated 4 October 2012, from Korea Marine Equipment Research Institute (KOMERI), Busan, Korea.

Drawing No. G-C-B25 Rev. 2 (11 pages) dated 1 June 2012 from STACO Co., Ltd.

Job Id: **262.1-000874-50**
Certificate No: **TAF00001AC**

"No hanger type":

Test report No. KOMERI-0402-14T2327 dated 13 February 2015, from Korea Marine Equipment Research Institute (KOMERI), Busan, Korea.

Drawing No. G-C-B25-3 Rev. 1 (12 pages) dated 2 October 2014 from STACO Co., Ltd.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

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

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

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 Program DNVGL-CP-0338, Section 4.