

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Horizontal Class B Division**

with type designation(s)

T30A(II) XY Type Continuous Class B-0 Ceiling

Issued to

**Huanan Building Materials (Shenzhen) Co., Ltd.
Dongguan, China**

is found to comply with

DNV GL rules for classification – Ships**DNV GL offshore standards****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 **2017-06-19**This Certificate is valid until **2022-06-18**.for **DNV GL**DNV GL local station: **China South CMC/ SIO**Approval Engineer: **Ginevra Giustiniani****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

"T30A(II) XY Type Continuous Class B-0 Ceiling"

ceiling panels consisting of 28.8 mm thick rock wool type insulation from Rockwool Firesafe Insulation (Guangzhou) Co., Ltd with density 120 kg/m³, faced on both sides with 0.6 mm thick galvanized steel sheets, which are glued to the rock wool with adhesive. The panels are joined together by means of male/female connections.

Total thickness of the panels is 30 mm.

The ceiling may be fitted with:

- Smoke detector, made of engineering plastics and screwed to the exposed side of the ceiling. Maximum size: ø107 x 37 mm.
- Air diffuser type CUS25, made of steel and manufacturer by Johnson Controls Denmark APS. Maximum opening: ø 160 mm.
- Cabin light type B0667, manufacturer by Aqua Signal AG. Constructed of steel housing and plastic lampshade. Maximum opening: 245 x 635 mm.
- Down light type CASA Marine H70-B0, manufacturer by Glamox ASA. Constructed of steel housing and plastic lampshade. Maximum opening: ø 153 mm.
- Sprinkler nozzle, made of steel. Maximum opening: ø 30 mm.

For further details, see the test report mentioned under Type Approval documentation below.

Application/Limitation

Approved as "continuous B-0 class ceiling" when panels are fixed to B class bulkhead by means of top profile and pop rivets.

Max. size of panel: 550 x 2500 mm (W x L).

Any surface materials used have to be approved for smoke and toxicity and low flame spread characteristics to IMO 2010 FTP Code Part 2 and 5 (or IMO FTPC Part 2 and 5 when in compliance with the IMO 2010 FTP Code Ch. 5.2 and 8) when required according to relevant rules.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5.

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

Type Approval documentation

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and 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 Programme DNVGL-CP-0338, Section 4.