

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

That the "B" Class divisions, fire integrity

with type designation(s)

Grenamat A - Bulkhead B-15

Issued to

GRENA, a.s.

Veselí nad Lužnicí, Czech Republic

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2017/306,**

item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2.3.4 & II-2/9 and IMO 2010 FTP Code

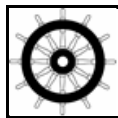
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-05-31.**

Issued at **Høvik** on **2017-06-01**

DNV GL local station:
Czechia

Approval Engineer:
Tomasz Werchowicz



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-000118-16**
Certificate No: **MEDB00002G4**

Product description

"Grenamat A - Bulkhead B-15"

are panels composed of 19 mm thick 'Grenamat A' board, with nominal density of 750 kg/m³ (manufactured by GRENA a.s.) and covered from both sides with 0.8 mm thick HPL (High Pressure Laminate) sheet. HPL sheets are fixed to the 'Grenamat A' board by means of adhesive.

The panels are fixed one to another by means of:

- galvanised steel Ω profiles, with dimensions of: 30 x 10 mm (W x H), screwed with 4.2 x 22 mm screws with pith of 300 mm or,
- steel-spline profile joints with dimensions: 2 x 25 mm (T x W).

Total panel thickness: 20.6 mm

For further details, please see documentation listed under Type Examination documentation below.

Application/Limitation

Approved for use as a vertical fire retarding division of class B-15.

Max. size of panel: 1220 x 3050 mm (W x H)

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

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

Type Examination documentation

Test Report No. Pr-17-2.057n-En dated 2nd May 2017 from PAVUS a.s., Fire Testing Laboratory, Veselí nad Lužnicí, Czech Republic.

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 and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see page 1).