

# DET NORSKE VERITAS

## EC TYPE-EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2008/67/EC, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-5435**

This is to certify that the  
**"B" Class divisions, fire integrity**

with type designation(s)  
**Grenamat A, 10 mm**

Manufacturer

**GRENA, a.s.**

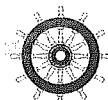
**Veselí nad Lužnicí, Czech Republic**

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

**Annex A.1, item No. A.1/3.11b and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2.3.4.4. and IMO FTP Code.**

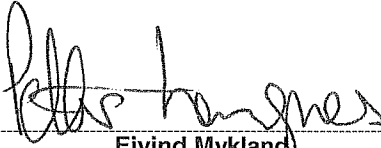
Further details of the equipment and conditions for certification are given overleaf.


Høvik, 2009-08-10  
for Det Norske Veritas AS



This certificate is valid until  
**2014-07-03**

Notified Body No.: **0575**

  
Eivind Mykland  
Head of Department

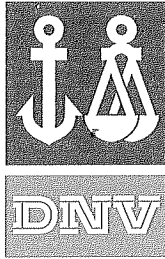
  
Rolf Emilsen  
Surveyor

DNV local office:  
**DNV Prague**



Notice: The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended.

The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.



Certificate No.: MED-B-5435  
Item No.: A1/3.11b  
Job Id.: 344.1-001909-1

## Product description

"Grenamat A, 10 mm"

The ceiling is composed of panels consisting of Grenamat A boards, 10 mm thick, with a nominal density of 800 kg/m<sup>3</sup>. The boards are faced on both sides with a HPL foil, 0.8 mm thick. The foil is glued to the insulation with Fastbond 40 glue. The panels are fitted together by galvanised steel  $\Omega$  and U profiles.

Ceiling to be supported by approved B-class bulkheads.

## Application/Limitation

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

Max panel size is 610 x 2440 x 11.6 mm (W x L x T).

When the ceiling is mounted at least 130 mm below a structural steel deck, the whole construction is to be regarded as a fire retarding division of class A-15.

The non-combustible material and any surface materials used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

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

## Type Examination documentation

Test report no. FIRES FR 022/04 (E) dated 19 May 2004 from FIRES Ltd., Batizovce, Slovakia and dwg no. 7.13.1.20/2001-2 from manufacturer.

Test report no. 14441-1/2 dated 5 February 2008 from Fire Technical Laboratory, Prague, Czech Republic.

Tested according to IMO FTPC Part 3 (IMO Res. A.754(18)).

## Marking of product

The product or packing is to be marked with name of manufacturer, type designation, fire-technical rating, Mark of Conformity and USCG approval (see below).

## Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a of Certificate Conformity.

## USCG Approval

An 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.