

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2014/93/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. 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 Non-combustible materials**

with type designation(s)

GLAVA MARINE MAT 16 AND GLAVA MARINE BATT 16 (GLAVA PROFF 34 rull and GLAVA PROFF 34 plate, GLAVA PROFF 34 stålstenderrull and GLAVA PROFF 34 stålstenderplate)

Issued to

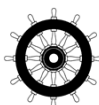
Glava A/S
OSLO, Norway

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

Annex A.1, item No. A.1/3.13 and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/3 II-2/5, II-2/9 & X/3, 2000 HSC Code 7 and IMO 2010 FTP Code

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

Høvik, 2015-11-24
for **DNV GL AS**



This Certificate is valid until
2018-12-02

Notified Body No.: **0575**

Vidar Dolonen
Head of Department

DNV GL local office:
Station Oslo Maritime and CAP

Øyvind Hoff
Surveyor

Job Id: **344.1-000909-26**
Certificate No: **MEDB00000DD**

Product description

"GLAVA MARINE MAT 16 and GLAVA MARINE BATT 16 (GLAVA PROFF 34 rull and GLAVA PROFF 34 plate, GLAVA PROFF 34 stålstenderrull and GLAVA PROFF 34 stålstenderplate)"
Glass wool of nominal density approx. 18 kg/m³.

Application/Limitation

The product may be used as an integrated part of approved fire resisting divisions only when tested as such.

The product, GLAVA MARINE MAT 16 with aluminium foil (18µm, glas net 5 x 10mm), named GLAVA MARINE MAT 16 ALU, is approved as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire. Approved for use throughout the accommodation.

Any adhesive used, other than the one used during testing for the product GLAVA MARINE MAT 16 ALU, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Maximum gross calorific value shall be documented separately where applicable, ref. SOLAS Chapter II-2 Reg. 5.3.2.

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

Type Examination documentation

Test report No. 22N010.10/00.275A, dated 3 October 2000, Assessment 22N010.10/00.275A dated 31 October 2007, No. 102010.70/07.180A dated 29 October 2007 (GLAVA MARINE MAT 16 ALU) and No. 102010.90/11.076a dated 23 November 2011. All reports from SINTEF NBL, Norges Brann tekniske Laboratorium, Trondheim, Norway.

Tests carried out

Tested according to IMO FTPC Part 1 and in compliance with IMO 2010 FTP Code Ch. 8.

Tested according to IMO FTPC Part 5 and Annex 2 Item 2.2 and in compliance with IMO 2010 FTP Code Ch. 8. (GLAVA MARINE MAT 16 ALU).

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, the MED Mark of Conformity and USCG approval if applicable (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 Certificate of Conformity.

USCG Approval

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.