DNV·GL

Certificate No:
MEDB00000EX

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 "A" Class divisions, fire integrity

with type designation(s)
Marine LY- A-60-B Type A-60 Class Bulkhead

Issued to
Luyang Energy-saving Materials Co., Ltd.
Zibo SD, China

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO 2010 FTP Code.

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

Høvik, 2015-12-08
for **DNV GL AS**

This Certificate is valid until
2019-08-13

Notified Body No.: **0575**

Vidar Dolonen
Head of Department

DNV GL local office:
Qingdao

Silje Helene Waagaard
Surveyor

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Product description

"Marine LY- A-60-B Type A-60 Class Bulkhead"
composed of 5 mm steel bulkhead insulated between and upon stiffeners with 2 layer of 20 mm fibre blanket "LYHX816T Type Environmental Protective Fibre Blanket" with density of 160 kg/m^3 (manufactured by client).

Total thickness of bulkhead: 45 mm.

The insulation to be fastened with fixed nails (21 sets / m^2).

Application/Limitation

Approved for use as a vertical fire retarding division of class A-60.

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 and use.

Type Examination documentation

Test Report No. FT09076 dated 7 May 2009 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing LY-A60-B from manufacturer.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation, MED Mark of Conformity and USCG approval number 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.