EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00008EH

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 AS under the authority of the Government of Norway.

This is to certify:

that the Fire Doors

with type designation(s)
COSMO A-60TRD Fire Door

issued to
COSMO Co., Ltd.
Busan, 11, Korea, Republic of

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2024/1975,**
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511, IMO MSC.1/Circ.1319

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

This Certificate is valid until **2029-09-29**.

Issued at **Høvik** on **2024-09-30**

DNV local unit:
Gimhae Station

Approval Engineer:
Joanna Kowalczuk

Notified Body
No.: **0575**

for **DNV AS**

Mydlak-Röder, Christine
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, and amended by Decision No 1/2023 dated August 21st, 2023.

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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees (“DNV”) arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

"COSMO A-60TRD Fire Door"
is a double leaf hinged door with one active and one non-active door and with separate upper part of door (transom). Each active and non-active door leaf consists of a 76 mm thick core of fire master marine plus blanket, nominal density of 128 kg/m³ (manufactured by THERMAL CERAMICS UK LTD) and one piece of 12.5 mm thick Gypsum board (manufactured by KCC CORPORATION) faced on both sides with 2 mm thick steel sheets. The upper part of the door leaves,150 mm space, are internally reinforced with 2 mm thick steel plate. The door leaves are each connected to the frame with 4 hinges on side.
The active door may be fitted with door lock CD-2000 type.

The upper part of door (transom) consists of 76 mm thick core of Firemaster marine plus blanket and two pieces of 12.5 mm thick Gypsum board (the same as above) faced on both sides with 2 mm thick steel sheets. Transom door is connected to the frame with 4 hinges on upper side.

Total thickness of door blade: 80 mm

The door frame is made from 4 mm thick steel sheets and may be fitted with M8x30 bolts (spaced 330 mm apart) or welded to the bulkhead.

For further details, see test report and drawings listed under Type Examination documentation below.

Application/Limitation

The door is approved for installation in steel bulkheads of class A-60. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Max. size of active door leaf:	1214 mm x 2229mm (w x h)
Max. size of non-active door leaf:	1205 mm x 2229mm (w x h)
Max. clear opening of door:	2400 mm x 3300 mm (w x h)
Max. size of upper part of door (transom):	2436 mm x 1063 mm (w x h)

The insulation materials 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.

Note that this is a fire safety certificate which only covers fire technical properties (i.e. not to cover strength evaluations related to watertightness, weathertightness, etc.).

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

Type Examination documentation

Test report No. KOMERI-0402-24T0941(E) dated 2 July 2024 from "KOMERI" Korea Marine Equipment Research Institute, Busan, Korea.

Drawings No. CD-FA60TRDD-6 (13 pages) dated 12 April 2024 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

The door has been successfully tested for extended test period of 68 minutes.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first page).