

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 Fire Doors

with type designation(s)
COSMO A-0SR-R (A Class Fire Door)

Issued to
COSMO Co., Ltd.
Busan, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2015/559**,
Annex A.1, item No. A.1/3.16 and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/and IMO 2010 FTP Code

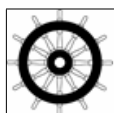
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2021-10-23**.

Issued at **Høvik** on **2016-10-24**

DNV GL local station:
Pusan

Approval Engineer:
Fryderyk Hoga



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body

Product description

"COSMO A-0SR-R (A Class Fire Door)"

Is a single blade hinged door with blade composed of 0.6 mm steel sheets bonded by adhesive to an insulating core of 45 mm mineral wool from both sides. Insulation is manufactured by KCC CORPORATION with density of 140 kg/m³. Door blade incorporates 2 mm thick doubling plate at the top and 1.5 mm thick channel at the bottom.

The door leaf is connected to the frame with 3 hinges and is fitted with a cylinder mortise lock.

Total thickness of door blade: 45 mm

The door frame, made from 4 mm thick steel sheets, may be bolted or clamped with a back plate by M8 bolts (spaced 250-300mm apart) or tack-/fully welded to the bulkhead.

The door frame may be of alternative construction/sill, for detail please see drawing 'CD-FA0SRRD-1'.

The door leafs may be fitted with:

- Window in the upper part of the door, composed of toughened glass (manufactured by Daehung, Korea) Thickness: 16 mm, window frame 1.5 mm thick and sealing packing 2 mm thick.
- Hinged hose port in the lower corner of doors (opposite to hinge side) and maximum dimension of 150 x 150 mm (W x H).
- Mechanical number lock.
- Peep lens.

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-0. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Max. size of door leaf:	1037 mm x 2107 mm (W x H)
Max. clear opening of door:	1000 mm x 2100 mm (W x H)
Max. clear opening of window:	400 mm x 400 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.

A fire door of marginally larger dimensions than a fire-tested fire door may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

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

Type Examination documentation

Test report No. KOMERI-0402-16T1849 dated 10 August 2016 from "KOMERI" Korea Marine Equipment Research Institute, Busan, Korea.

Drawings No. CD-FA0SRRD-1 (12 pages) dated 16 June 2016 from COSMO.



Job Id: **344.1-006045-1**
Certificate No: **MEDB00001RJ**

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 or packing 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).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. For larger windows, USCG shall be contacted.