

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 Norway.

This is to certify:

That the Fire Doors

with type designation(s)
M3-1SCO-A60

Issued to

Hyundai Elevator Co., Ltd.
Icheon-si, Gyeonggi-do, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511

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

This Certificate is valid until **2023-08-16**.

Issued at **Høvik** on **2018-08-17**

DNV GL local station:
Seoul

Approval Engineer:
Grzegorz Wolski



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"M3-1SCO-A60"

Double-leafed sliding elevator door with door leaves constructed from 1.6 mm thick steel plate from exposed side, 30.5 mm thick insulation material type "Cerak-Wool" (density 100 kg/m³) from KCC Corporation, 12.5 mm thick gypsum board (density 840 kg/m³) from KCC Corporation, 3 mm thick insulation material type "Cerak-Wool – cloth type" (density 164 kg/m³) from KCC Corporation and 1.2 mm thick steel plate from unexposed side.

The insulated door frame composed of steel profiles and is bolted with twenty M16 bolts to the bulkhead. Total thickness of door leafs is 50 mm.

For further details see the test report mentioned 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.

The insulation material, and any surface materials and adhesive used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Max. size of door leaf: 665 x 2186 mm (w x h).

Max. clear opening: 1200 x 2100 mm (w x h).

Restricted application: fire from corridor side.

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

Type Examination documentation

Test report No. A2012-1277 dated 13 May 2013 from Fire Insurers Laboratories of Korea.

Drawing Nos.: V0011318 (2 pages), V0011319 (2 pages), 37500276, 37500277, 37500289, 37500260, 36100261, 36100061, 36100062, 16100097, 37100039 all dated 2012-12-06 from manufacturer.

Drawing No: 16100097 dated 2012-05-02 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Part 3.

Marking of product

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