

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007GJ

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 'A' and 'B' class fire proof windows and side scuttles

with type designation(s)
SG-FS2R3-A0

Issued to

Samgong Co., Ltd.
Busan, Republic of Korea

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

Regulation (EU) 2021/1158,
item No. MED/3.25. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1120 and IMO 2010 FTP Code,
IGC Code 3

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

This Certificate is valid until **2026-09-05**.

Issued at **Høvik** on **2021-09-06**

DNV local station:
Gimhae Station

Approval Engineer:
Helge Bjørnara



Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
Head of Notified Body



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"SG-FS2R3-A0"

The window unit is composed of a 12 mm thick toughened pressure glass from Jeong-AM Safety Glass, and a 19 mm thick fire resistant glass from Samgong (model FS2R2-A0), mounted with an air gap of 6 mm in between. Total window unit thickness is 37 mm.

The window frame is composed of a 12 mm thick main frame of mild steel screwed (M6, max. c/c 75 mm) to a 5 mm thick glass keeper of stainless steel and welded to 12 mm thick glass stopper of mild steel on the opposite side, keeping the window unit in position.

The main frame is fully welded to the steel bulkhead on the toughened pressure glass side and tack welded on the side of the fire resistance glass.

The window assembly also includes setting blocks (made from hardboard) and glass packing (synthetic rubber) between the window unit and window frame.

For further details, see drawing listed under Type Examination documentation below.

Application/Limitation

The window is approved for installation in steel bulkheads of class A-0. Other applications are subject to case-by-case approval.

Restricted application: Fire against fire resistant glass only (from inside).

Maximum size of window:	2074 x 1574 mm (W x H).
Maximum size of clear opening:	2000 x 1500 mm (W x H).

The window has only been evaluated with respect to fire technical properties (e.g., strength requirements have not been considered). Arrangement and location of any window is subject to approval from relevant authorities in each case.

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

Type Examination documentation

Test report No. KOMERI-0402-21T1997(E) dated 22 July 2021 from KOMERI, Busan, Korea.

Drawing No. SG-FS2R3-A0, Rev. 1, dated 12 May 2021 from maker.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

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