DNV·GL

Certificate No:
MEDB0000471

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 "A" Class divisions, fire integrity

with type designation(s)
A-60 fire rated wall system type G21 Fire Panel

Issued to
InterDam Holding B.V.
Ridderkerk, Netherlands

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434

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

This Certificate is valid until **2023-07-30**.

Issued at **Høvik** on **2018-07-31**

DNV GL local station:
Rotterdam, Product Certification /Verification

Approval Engineer:
Helge Bjørnarå

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

NORWEGIAN ACCREDITATION PROD 019

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Product description

"A-60 fire rated wall system type G21 Fire Panel"
comprising of sandwich panels with tongue and groove joints. The joints are provided with an intumescent strip and are sealed with an EPDM gasket at both panel faces. The panels comprise 0.6 mm thick galvanized steel skins and a core from 100 mm mineral wool of nominal density 120 kg/m^3. The screwed fixing of the panels to a steel substructure is sealed with a combination of an air seal and an intumescent seal.

Tested panel thickness: 100 mm.

Duct penetration:
A 3 mm steel duct, max diameter 1120 mm, penetrating the sandwich panel. The gap between the steel duct and sandwich panel cut-out is sealed with insulation type Firebatt 45 produced by Rockwool. The seam and insulation is to be shielded by a 3 mm steel blanking plate. The blanking plate to be tack welded to the spool piece, sealed with Zwaluw Fire Sealant 1200 °C. A foam seal and an intumescent strip were applied between the blanking plate and the sandwich panel. At the non-fire side a flashing consisting of a steel plate to be provided to shield the insulation that was applied around the air duct. The flashing and blanking plate were bolted together by the use of steel bolts M8 x 150 mm with associated lock nuts and plain washers. The duct is to be insulated with Rockwool Marine Wired Mat 105+ Alu Foil, thickness 30 mm.

Pipe penetration:
A 200 mm steel sleeve, which penetrating the sandwich panel, is welded to a 6 mm steel flange. The gap between the sleeve and sandwich panel cut-out is sealed with insulation type Firebatt 45 produced by Rockwool. On the other side a 0.75 mm steel flashing plate is fitted. The flange plate and flashing plate are bolted together through the panels. The pipe and sleeve penetration is to be according to a valid type approval (ref. MED-B-8556). The penetration including flange plate and 500 mm along the pipe is to be fully insulated with 25 mm thick Searox SL740 (Marine Batts 45).

Cable transit:
Type approved Roxtec cable transit is bolted to one side of the sandwich panels through the panels and into a sub frame. On the other side of the Roxtec cable transit the transit is insulated with 90 mm thick Searox SL740 (Marine Batts 45) held in position with a 0.75 mm steel flashing attached to a sub frame.

Equipment mounting system (EMS)
Equipment of 30 kg or less may be attached to the G21 Fire Panels.

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

The products may be manufactured at the premises of:
- Trimo d.d., Trebnje, Slovenia

Application/Limitation

Approved for use as non-load bearing fire retarding bulkhead of class A-60.

General application: Fire hazard from either side

Tested panel size: 1000 mm x 2980 mm (width x height) and 1000 mm x 4932 (width x height)

The use of this product shall be limited to applications specifically approved by the Administration in question, see IMO 2010 FTP Code part 3, Appendix 1, items 1.12 and 1.13. The construction shall in any case not be used as part of main fire zone bulkheads and stairways enclosures on passenger ships (see also IMO MSC/Circ.1005).

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.

Installation shall be strictly in accordance with InterDam's installation and maintained instruction.

Type Examination documentation

Test report No. 273409 dated 12 October 2011, from BRE Global, UK.
Test report No. 2012-Efectis-R9518[Rev.1] dated February 2013 from Efectis, The Netherlands.
Test report No. 2013-Efectis-R0375[Rev.2] dated October 2013 from Efectis, The Netherlands.
Test report No. 2012-Efectis-R0508a, dated December 2013 from Efectis, The Netherlands.
Test report No. 293615, issue 1, dated 14 October 2014 from BRE Global, UK.
Test report No. 2018-Efectis-R000838 dated June 2018 from Efectis, The Netherlands.

Drawing No. 11-008, sheet 01-201, rev. F1 dated 10 August 2011, from manufacturer.

Tests carried out

Tested according to IMO FTP Code 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 and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see first page).