

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Class A Bulkhead**with type designation(s)
A-60 Class Bulkhead YSDY-W150

Issued to

You Shin Dan Yeol Co., Ltd.
Ulsan, Republic of Koreais found to comply with
DNV GL offshore standards
DNV GL rules for classification – Ships
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations**Application :****Product approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Approved for use as a fire retarding division of class A-60.****This certificate is recognized by Transport Canada.**Issued at **Høvik** on **2017-05-19**This Certificate is valid until **2022-05-18**.DNV GL local station: **Ulsan**for **DNV GL**Approval Engineer: **Tomasz Werchowicz**.....
Marte Eknæs Edvardsen
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-025808-1**
Certificate No: **TAF00000NC**

Product description

"A-60 Class Bulkhead YSDY-W150"

is composed of a structural steel bulkhead insulated with 40 mm thick mineral wool with nominal density of 150 kg/m³ manufactured by KCC Corporation. Insulation is fitted between, around and inside the stiffeners.

The insulation is fixed to the bulkhead by means of steel pins ø3.6 mm welded to the bulkhead and steel washers ø32 mm. Pins are installed with rectangular pattern with nominal spacing, of 300 x 300 mm for pins located between stiffeners and, with nominal spacing of 300 mm for pins on stiffeners. Maximum distance from joint (blankets edges) to the pins is 150 mm.

For further details see approved drawings listed under Type Approval documentation below.

Application/Limitation

Approved for use as a vertical fire retarding division of class A-60.

Restricted application: Fire from insulated side only.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code Annex 1 Parts 2 and 5) when required according to relevant rules.

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

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire technical rating.

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.