

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Fire Seal**

with type designation(s)
Flexible Fire Seal: Remitite EDT-629

Issued to

Remitite Co., Ltd.
Gimhae-si Gyeongsangnam-do, Republic of Korea

is found to comply with
DNV GL offshore standards

Application :

Product approved by this certificate is accepted for installation on all vessels classed by DNV GL.

Approved for use as fireskirt expansion joint/seal in H-120 class divisions.

Approved for use as a jet fire barrier of rating JF/Fire Resistance Seal/140/90.

Issued at **Høvik** on **2017-06-02**

This Certificate is valid until **2022-06-01**.

DNV GL local station: **Gimhae Station**

for **DNV GL**

Approval Engineer: **Tomasz Werchowicz**

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Mårten Schei-Nilsson
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.



Product description

"Flexible Fire Seal: Remitite EDT-629"

Composed of mixture of ceramic wool (manufacturer by KCC Corporation, with nominal density of 128 kg/m³), filler, fireproof material and functional silicon polymer.

Jet fire test setup:

The fire seal is mounted on the unexposed side of a insulated 12 mm thick steel plate with an opening. The steel opening size is 600x400mm. The insulation opening size is 350x200 mm. The steel plate is insulated with 4x25 mm KCC Cerak Wool Hard Board with nominal density of 250 kg/m³. The fire seal is bolted to the steel plate with 34 M12x75L bolts and nuts. 10 mm steel support is installed on the unexposed side of the fire seal. The fire seal is installed in an arc, with 75x75mm square steel pipe at the top and bottom. A rubber support is installed between the fire seal and the steel plate (above and below the cut out).

Size of fire seal: 1200x1380mm.

For further details, see Type Approval documentation below.

Application/Limitation

Approved for use as fireskirt expansion joint/seal in H-120 class divisions.

For both applications:

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

For jet fire application:

Approved for use as a jet fire barrier of rating (Type of fire/Type of application/Critical temperature rise (°C)/Period of resistance (minutes)): JF/Fire Resistance Seal/140/90.

Any project specific design solutions arrived at on basis of this certificate are to be further validated by project specific approvals carried out by the appointed verifying authority for each project in each case at the detail engineering stage.

The approval refers only to the fire resistance properties of the system.

The protective coating is not defined as non-combustible, and should not be used in accommodation or in enclosed areas.

Type Approval documentation

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

Test reports:

- No. KOMERI-0402-11T825-3 dated 10th May 2012,
 - No. KOMERI-0402-13T1293 (jet fire test) dated 30th July 2013,
- both from Korea Marine Equipment Research Institute (KOMERI), Busan, Korea.

Drawing no. DR-R130417T (jet fire test setup) dated 17th April 2013 from manufacturer.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8, and the hydrocarbon time-temperature curve specified in ISO 834-3.

Tested according to ISO 22899-1.

Marking of product

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



Job Id: **262.1-013976-2**
Certificate No: **TAF00000NJ**

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.