

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Class A and B Penetration**with type designation(s)
Cable penetration sealing system (RS-105 & RRS-15)

Issued to

Remitite Co., Ltd.
Gimhae-si, Gyeongsangnam-do, Republic of Koreais found to comply with
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations
DNV GL rules for classification – Ships
DNV GL offshore standards**Application :****Approved as A-60 cable penetration in steel decks.****This certificate is recognized by Transport Canada.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2020-03-16**This Certificate is valid until **2025-03-15**.for **DNV GL**DNV GL local station: **Gimhae Station**Approval Engineer: **Helge Bjørnara**

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.



Job Id: **262.1-028222-1**
Certificate No: **TAF000017H**

Product description

Cable penetration sealing system (RS-105 & RRS-15), composed of 180 mm long, steel coaming with thickness of at least 6 mm welded to the deck. Remitite Rubber Sleeve 15 (RRS-15) is wrapped around the cables and filled in the remaining space between coaming and cables. The coaming is dammed on both ends with 20 mm Remitite Sealant 105 (RS-105).

The steel coaming is to be partially insulated with A-60 insulation.

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

Application/Limitation

Approved for use as a cable penetration system in class A-60 decks.

Approved for use in class A-0, A-15 and A-30 when the penetration system is insulated as A-60. In addition, the division is to be insulated with A-60 insulation at least 200 mm around the penetration.

Deck penetrations:

Application	Min. size [mm] (W x H x D)	Max. size [mm] (W x H x D)	Filling rate [%]	Coaming position in division	Max. cable diameter [mm]
Triangle	300 x 260 x 180	620 x 535 x 180	0 – 12.8	150 mm on the underside	105.1
Rectangular	680 x 370 x 180	680 x 370 x 180	0 (empty)	150 mm on the underside	NA
Rectangular	273 x 161 x 180	273 x 161 x 180	0 (empty)	Symmetrical	NA

Minimum distance between cables and between cables and coaming is 82 mm.

Approved for air tightness up to a design pressure of 0.33 bar (test pressure 0.5 bar) and water tightness up to a design pressure of 1.67 bar (test pressure 2.5 bar).

Penetration systems are not to be used for penetrating boundaries of tanks.

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

Type Approval documentation

Certification in accordance with Class Programmes DNVGL-CP-0338 dated September 2018.

Fire test(s):

Test report No. KOMERI-0402-18T0404 dated 13 April 2018 from KOMERI, Busan, Korea.

Gas tightness and water tightness test(s):

Test report No. RTQ0202-1601Q01, dated 20 January 2016 from manufacturer.

Drawing No. RMC-TEST-RS105-5QL-0101, Rev.0, dated 6 February 2018 from maker.

Tests carried out

Tested in accordance with IMO 2010 FTP Code Part 3.

Pressure tests with water and air according to DNV Type Approval Programme 8.471.19-1

Marking of product

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



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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.