



## Confirmation of Product Type Approval

**Company Name:** ROXTEC INTERNATIONAL AB

**Address:** ROMBVAGEN 2 SE 371 65 Sweden

**Product:** Penetration Device for Pipe Deck and Bulkhead Penetration Sealing

**Model(s):** RS PPS and RS PPS/S series (steel divisions)

**Endorsements:**

<b>Certificate Type</b>	<b>Certificate Number</b>	<b>Issue Date</b>	<b>Expiry Date</b>
Product Design Assessment (PDA)	20-HS1948304-PDA	30-JAN-2020	29-JAN-2025
Manufacturing Assessment (MA)	18-GB3595269	07-DEC-2018	08-JAN-2024
Product Quality Assurance (PQA)	NA	NA	NA

### **Tier**

3 - Type Approved, unit certification not required

### **Intended Service**

Single plastic pipe penetrations in Class A0, A15, A30, and A60 bulkheads and decks for ships and offshore application. Penetrations of watertight and gas tight bulkheads and decks up to the specified pressure.

### **Description**

Roxtec plastic pipe sealing system with multi diameter technology.

RS PPS 31-450 - Consisting of a steel sleeve, bolted or welded to a steel section. The sleeve is fitted at both ends with Roxtec RS seals (standard or EMC versions) including intumescent material in between.

RS PPS/S 31-150 - Consisting of a steel sleeve, bolted, welded or SLX-type sleeve attached through expansion, on to the steel sections. The sleeve is fitted with one single RS PPS/S seal with integrated intumescent material. Minimum thickness for steel sleeve is 1.5 mm.

### **Ratings**

Fire Rating: A0, A15, A30, and A60 for bulkheads and decks.

RS PPS pressure tested for 6 bar watertightness and 4 bar gastightness.

RS PPS/S pressure tested for 6 bar watertightness and 3 bar gastightness.

A60 Steel bulkhead division (for watertight bulkhead division for Passenger Ships and Special Purpose Ships as per SOLAS II-1/13.2.3).

RS PPS/S 43-150. The transits are tested for watertightness with 2 bar test pressure for 60 minutes after

an A60 fire test.

### Service Restrictions

- 1) Maximum plastic pipe size 355 mm diameter.
- 2) Not for use in tank boundaries.
- 3) Unit Certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

### Comments

- 1) All seal types should be installed in accordance with manufacturers ABS approved installation drawings.
- 2) Insulation material is to be A60 approved type and installed in accordance with manufacturers ABS approved installation drawings to the Surveyors satisfaction.
- 3) Watertight bulkheads or decks for pipe penetrations are to be tested as per ABS Marine Vessels Rules 3-7-1/Table1.
- 4) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 5) This approval of penetrations passing through watertight bulkhead is not to be construed as a substitute for flag Administration's approval for the purpose of SOLAS (Consolidated Edition 2014), as amended.
- 6) All seal types should be installed in accordance with manufacturer's ABS approved installation drawings.

### Notes, Drawings and Documentation

#### Certificate Drawings List

- 1) Drawing No. S1550955, Rev. A - RS PPS with Pipes - A60 Class Steel Deck/Bulkhead
- 2) Drawing No. S1550956, Rev. A - RS PPS with Pipes - A0 Class Steel Deck/Bulkhead
- 3) Drawing No. S1550958, Rev. A - RS PPS/S with Pipes - A60 Class Steel Deck/Bulkhead
- 4) Drawing No. S1550959, Rev. A - RS PPS/S with Pipes - A0 Class Steel Deck/Bulkhead
- 5) Drawing No. S1550982, Rev. A - RS PPS/S Plastic Pipe - A-Class Watertight Steel Divisions

#### Fire Test Report Report Date Laboratory

P502921 2005-12-01 SP Technical Research Institute of Sweden  
 P701755 2007-06-12 SP Technical Research Institute of Sweden  
 P902394 2009-05-25 SP Technical Research Institute of Sweden  
 6P10024 2017-03-07 SP Technical Research Institute of Sweden  
 8P04040 2018-08-13 SP Technical Research Institute of Sweden  
 8P07094 2020-01-16 SP Technical Research Institute of Sweden

RS-18/B-023/E 2018-01-29 CTO Centrum Techniki Okretowej S.A. Poland  
 RS-18/B-484/E 2018-12-10 CTO Centrum Techniki Okretowej S.A. Poland  
 RS-18/B-291/E 2018-08-20 CTO Centrum Techniki Okretowej S.A. Poland  
 RS-18/B-292/E 2018-09-13 CTO Centrum Techniki Okretowej S.A. Poland  
 RS-18/B-293/E 2018-09-13 CTO Centrum Techniki Okretowej S.A. Poland  
 RS-19/B-256/E 2019-08-20 CTO Centrum Techniki Okretowej S.A. Poland  
 RS-19/B-356/E 2019-10-18 CTO Centrum Techniki Okretowej S.A. Poland  
 RS-19/B-424/E 2019-11-27 CTO Centrum Techniki Okretowej S.A. Poland  
 PGA10025 2011-12-22 DBI - The Danish Institute of Fire and Security, Denmark  
 PGA10141 2012-07-10 DBI - The Danish Institute of Fire and Security, Denmark  
 PGA11302A 2019-01-16 DBI - The Danish Institute of Fire and Security, Denmark  
 N141S7E5 2019-03-10 Roxtec International AB, Sweden  
 N141UBRY 2019-08-07 Roxtec International AB, Sweden  
 N141NBR5 2018-11-05 Roxtec International AB, Sweden  
 N141RA6Z 2019-01-24 Roxtec International AB, Sweden  
 N141SGZW 2019-03-10 Roxtec International AB, Sweden  
 N141SMF7 2019-03-15 Roxtec International AB, Sweden  
 N141SMF8 2019-03-15 Roxtec International AB, Sweden  
 N141SRGA 2019-03-15 Roxtec International AB, Sweden

Water and Gas Tightness Test - DNV-GL Report Report Date Laboratory  
 MLM060511 2006-02-28 Roxtec International AB, Sweden  
 MLM070656 2007-04-18 Roxtec International AB, Sweden  
 SKM-04-4088 2004-06-16 Roxtec International AB, Sweden

### **Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 29/Jan/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

### **ABS Rules**

2020 ABS Rules for Building and Classing Marine Vessels 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-2/9.7.1 & 2, 4-6-3/7.11

2020 ABS Rules for Building and Classing Mobile Offshore Units 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-2-1/11.15, 4-2-2/7.7.4

**International Standards**

SOLAS (2014 Consolidated Edition ) Ch. II-2, Reg. 9.3.1, Ch. II-1, Part B-2, Reg. 13.2.3;

2010 Resolution MSC.307(88), 2010 FTP Code (2012 Edition), Annex 1 Part 3; IMO Resolution A.754 (18).

**EU-MED Standards**

NA

**National Standards**

NA

**Government Standards**

PDA conforms to Transport of Canada - Marine Machinery Regulations (SOR/90-264), 2019.

**Other Standards**

NA



A handwritten signature in blue ink, appearing to read 'Joseph W. ...', is positioned above the printed name.

Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 18-Nov-2021 3:55

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.