



**TYPE APPROVAL CERTIFICATE**  
No. **LAB115218CS/001**

**This is to certify** that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	<b>Devices for the passage of pipes through A or B</b>
<i>Type</i>	<b>Class divisions</b>
<i>Applicant</i>	<b>Roxtec SLEEV-IT FC MAR ALU on aluminium bulkheads</b>
<i>Manufacturer</i>	<b>ROXTEC INTERNATIONAL AB</b>
<i>Place of manufacture</i>	<b>ROMBVAGEN 2, P.O. BOX 540</b>
<i>Reference standards</i>	<b>SE-37123 KARLSKRONA</b>
	<b>SWEDEN</b>
	<b>ROXTEC INTERNATIONAL AB</b>
	<b>ROMBVAGEN 2, P.O. BOX 540</b>
	<b>SE-37123 KARLSKRONA</b>
	<b>SWEDEN</b>
	<b>IMO Res. MSC.307(88)-(2010 FTP Code)</b>

*Issued in Genoa on May 10, 2018. This Certificate is valid until May 9, 2023*

**RINA Services S.p.A.**

*Enrico Cabella*

**This certificate consists of this page and 1 enclosure**

**TYPE APPROVAL CERTIFICATE**No. **LAB115218CS/001**

Enclosure - Page 1 of 2

**Roxtec SLEEV-IT FC MAR ALU on aluminium bulkheads****Product description**

Device for the passage of plastic pipes (not reinforced and multilayer) through A Class aluminium bulkheads composed of a stainless steel tubular casing fitted with aluminium flange tack welded to the bulkhead plate. The castings are provided of a break in order to permit the insertion of pipe and intumescent material and have a toggle clip arrangement located at the break in order to secure the casings around the pipes. The division insulation covers also the transits that may be fitted with additional insulation, laid upon the bulkhead insulation on the side not exposed to the fire.

**Field of application**

Fire resistant A-60 Class plastic pipe penetrations through aluminium bulkheads as per following tables:

Bulkheads insulated on both sides by means of two layers of mineral wool 30 mm thick each and having density of 130 kg/m<sup>3</sup>.

TYPE OF TRANSITS - PIPE DIAMETER	ADDITIONAL INSULATION	TRANSIT FIXING AND NOTES
Transits from SLEEV-IT FC-MAR16M ALU up to SLEEV-IT FC-MAR110M ALU pipe diameter from 16 mm up to 110 mm	No additional insulation	Seal fitted on the exposed or unexposed side.
Transits greater than SLEEV-IT FC-MAR110M ALU up to SLEEV-IT FC-MAR225M ALU - pipe diameter greater than 110 mm up to 225mm	No additional insulation	Seal fitted on the exposed side

Bulkheads insulated on both sides by means of two layers of mineral wool 40 mm thick each and having density of 100 kg/m<sup>3</sup>.

TYPE OF TRANSITS - PIPE DIAMETER	ADDITIONAL INSULATION	TRANSIT FIXING AND NOTES
Transits from SLEEV-IT FC-MAR160M ALU up to SLEEV-IT FC-MAR200M ALU pipe diameter from 160 mm up to 200 mm	Two layers of mineral wool 40 mm thick each and having density of 100 kg/m <sup>3</sup> and width of 100 mm around the pipe in case of seal fitted on the unexposed side	Seal fitted on the exposed or unexposed side. Transits fitted with Roxtec Fire Sealant
Transits greater than SLEEV-IT FC-MAR200M ALU up to SLEEV-IT FC-MAR225M ALU - pipe diameter greater than 200 mm up to 225mm	Two layers of mineral wool 40 mm thick each and having density of 100 kg/m <sup>3</sup> and width of 100 mm around the pipe	Seal fitted on the unexposed side. Transits fitted with Roxtec Fire Sealant

**TYPE APPROVAL CERTIFICATE**

**No. LAB115218CS/001**

**Enclosure - Page 2 of 2**

**Reference documents**

Roxtec drawings included in DBI Report No. PGA10801A dated 29 August 2016 and in CTO Report No. RS-17/B-555/E dated 15 January 2018.

**Tests carried out**

Tests as per DBI Report No. PGA10801A dated 29 August 2016 and CTO Report No. RS-17/B-555/E dated 15 January 2018 issued according to IMO 2010 FTP Code - Annex 1 - Part 3.

**General conditions for the approval**

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.

**Genoa 10/05/2018**

**File Allegato/Attached file**



**TYPE APPROVAL CERTIFICATE**  
No. **LAB115218CS/002**

**This is to certify** that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	<b>Devices for the passage of pipes through A or B Class divisions</b>
<i>Type</i>	<b>Roxtec SLEEV-IT FC MAR ALU on aluminium decks</b>
<i>Applicant</i>	<b>ROXTEC INTERNATIONAL AB ROMBVAGEN 2, P.O. BOX 540 SE-37123 KARLSKRONA SWEDEN</b>
<i>Manufacturer</i>	<b>ROXTEC INTERNATIONAL AB</b>
<i>Place of manufacture</i>	<b>ROMBVAGEN 2, P.O. BOX 540 SE-37123 KARLSKRONA SWEDEN</b>
<i>Reference standards</i>	<b>IMO Res. MSC.307(88)-(2010 FTP Code)</b>

Issued in **Genoa** on **May 10, 2018**. This Certificate is valid until **May 9, 2023**

**RINA Services S.p.A.**

*Enrico Cabella*

**This certificate consists of this page and 1 enclosure**

**TYPE APPROVAL CERTIFICATE**  
**No. LAB115218CS/002**  
**Enclosure - Page 1 of 2**  
**Roxtec SLEEV-IT FC MAR ALU on aluminium decks**  
**Product description**

Device for the passage of plastic pipes (not reinforced and multilayer) through A Class aluminium decks composed of a stainless steel tubular casing fitted with aluminium flange welded to the deck plate. The casings are provided of a break in order to permit the insertion of pipe and intumescent material and have a toggle clip arrangement located at the break in order to secure the casings around the pipes. Decks insulated on the side exposed to the fire by means of two layers of mineral wool 30 mm thick each and having density of 130 kg/m<sup>3</sup>. The division insulation covers also the transits when installed on the exposed side.

**Field of application**

Fire resistant A-60 Class plastic pipe penetrations through aluminium decks as per following tables:

TYPE OF TRANSITS - PIPE DIAMETER	ADDITIONAL INSULATION	TRANSIT FIXING AND NOTES
Transit SLEEV-IT FC-MAR16M ALU - pipe diameter 16 mm	No additional insulation	Seal fitted on the exposed or unexposed side. Transits fitted with or without Roxtec Fire Sealant
Transits from SLEEV-IT FC-MAR16M ALU up to SLEEV-IT FC-MAR225M ALU pipe diameter from 16 mm up to 225 mm	No additional insulation	Seal fitted on the unexposed side.
Transits from SLEEV-IT FC-MAR16M ALU up to SLEEV-IT FC-MAR225M ALU pipe diameter from 16 mm up to 225mm	No additional insulation	Seal fitted on the exposed side. Transits fitted with Roxtec Fire Sealant

**TYPE APPROVAL CERTIFICATE**

**No. LAB115218CS/002**

**Enclosure - Page 2 of 2**

**Reference documents**

Roxtec drawings included in DBI Report No. PGA10802A dated 29 August 2016 and in CTO Report No. RS-17/B-210/E dated 2 June 2017.

**Tests carried out**

Tests as per DBI Report No. PGA10802A dated 29 August 2016 and CTO Report No. RS-17/B-210/E dated 2 June 2017 issued according to IMO 2010 FTP Code - Annex 1 - Part 3.

**General conditions for the approval**

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.

**Genoa 10/05/2018**

**File Allegato/Attached file**