



TYPE APPROVAL CERTIFICATE
No. LAB167420CS/001

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

<i>Description</i>	Devices for the passage of pipes through A or B Class divisions
<i>Type</i>	Roxtec Sleeve it Marine Fire Collar
<i>Applicant</i>	ROXTEC INTERNATIONAL AB ROMBVAGEN 2, BOX 540 SE-37123 Karlskrona SWEDEN
<i>Manufacturer</i>	ROXTEC INTERNATIONAL AB
<i>Place of manufacture</i>	ROMBVAGEN 2, BOX 540 SE-37123 Karlskrona SWEDEN
<i>Reference standards</i>	IMO Res. MSC.307(88)-(2010 FTP Code)

Issued in Genoa on August 12, 2020. This Certificate is valid until August 11, 2025

RINA Services S.p.A.

Enrico Cabella

This certificate consists of this page and 1 enclosure

TYPE APPROVAL CERTIFICATE
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Roxtec Sleeve it Marine Fire Collar
Product description

Devices for the passage of pipes and ducts through A Class decks as described in the following tables; the devices consist of a stainless steel tubular casing, having length of 60 mm, fixed to the deck plate tack welding or bolting the collar tabs or the continuous flange. 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 used to secure the casings around the pipes.

Plastic pipes - A-60 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
from 16 up to 50	Exposed or unexposed	TRP 345 – 1.8 mm	from 2 up to 3
from 51 up to 225	Exposed or unexposed	INTUMEX L - 2.5 mm	from 3 up to 8
from 226 up to 320 (*)	Exposed	INTUMEX L - 2.5 mm	10

(*) the casing length is 122 mm

Plastic pipes - A-0 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
from 16 up to 50	Exposed	TRP 345 – 1.8 mm	from 2 up to 3

PE-ALU-PE pipes - A-60 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
from 16 up to 50	Exposed or unexposed	TRP 345 – 1.8 mm	from 2 up to 3
63	Exposed or unexposed	INTUMEX L - 2.5 mm	3

PE-ALU-PE pipes - A-0 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
32	Exposed	INTUMEX L - 2.5 mm	3
63	Exposed or unexposed	INTUMEX L - 2.5 mm	3

TYPE APPROVAL CERTIFICATE**No. LAB167420CS/001****Enclosure - Page 2 of 3****Pre-insulated thermoplastic pipes - A-60 Class**

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
75	Exposed Additional insulation - non combustible mineral wool cylinder, 2 layers, thickness 45+45 mm, density of 90 kg/m ³ and width of 100 mm around the pipe Sealing by means of Sika Fire Seal Marine N on the unexposed side	INTUMEX L - 2.5 mm	4
315	Exposed Additional insulation - non combustible mineral wool cylinder, 2 layers, thickness 45+45 mm, density of 90 kg/m ³ and width of 100 mm around the pipe Sealing by means of Sika Fire Seal Marine N on the unexposed side	INTUMEX L - 2.5 mm	10

Notes:

- two pipes, 160 mm diameter PB and 16 mm diameter uPVC fitted with Sleeve-it pipe seals and Sleeve-it intumescent sealant, were subjected to a hydrostatic test and an air pressure test respectively at 1 bar and 0.02 bar and no leakage was reported after 30 minutes, as detailed in the DNV Test Report No. LDN-08-045 dated 31 January 2008.
- two fire collar incorporating intumescent seal and elastomer pipe sealing ring (Sleeve-it drawing No. SI/09/031 Rev. A dated 25 August 2009) having diameter of 16 mm and 110 mm, were subjected to a hydrostatic test and an air pressure test respectively at 3.5 bar and 1 bar and no leakage was reported after 30 minutes, as detailed in the Lloyd's Register Certificate No. SOU 0901586/1 dated 8 January 2010.

Field of application

Fire resistant plastic pipes, PE-ALU-PE pipes and pre-insulated thermoplastic pipes penetration through A Class decks.

Reference documents

Drawings as included in Test Reports issued by:

- Warringtonfire - No. 184391/A, No. 175486/A, No. 170080/B, No. 190890/A Issue 2, No. 309638A, No. 329449
- SP - No. 6P02249, No. 6P08395, No. 5P00771, No. 5P08395
- Gerbam - No. 878/07/A/NP/R 102
- DBI - No. PGA11388A, No. PGA11611A, No. PGA110871A rev 2

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Tests carried out

Tests as per test reports issued according to IMO FTP Code:

- SP No. 6P02249 dated 17 August 2016
- Warringtonfire No. 184391/A dated 17 December 2009;
- SP No. 6P08395 dated 17 March 2016
- SP No. 5P00771 dated 25 November 2015
- Warringtonfire No. 175486/A dated 31 October 2008;
- Warringtonfire No. 170080/B dated 30 April 2008;
- Gerbam No. 878/07/A/NP/R 102 dated 28 March 2007
- Warringtonfire No. 190890/A Issue 2 dated 26 May 2010;
- DBI No. PGA11388A dated 14 August 2019
- SP No. 5P08395 dated 17 March 2016
- Warringtonfire No. 309638A dated 20 September 2011;
- Warringtonfire No. 329449 dated 13 August 2013
- DBI No. PGA11611A dated 11 January 2020
- DBI No. PGA110871A rev 2 dated 16 January 2018

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.

This certificate annuls and replaces the certificate No. LAB174915CS/001 dated 15/9/2015 due to renewal.

Genoa August 12, 2020

File Allegato/Attached file



TYPE APPROVAL CERTIFICATE
No. LAB167420CS/002

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

<i>Description</i>	Devices for the passage of pipes through A or B Class divisions
<i>Type</i>	Roxtec Sleeve it Marine Fire Collar
<i>Applicant</i>	ROXTEC INTERNATIONAL AB ROMBVAGEN 2, BOX 540 SE-37123 Karlskrona SWEDEN
<i>Manufacturer</i>	ROXTEC INTERNATIONAL AB
<i>Place of manufacture</i>	ROMBVAGEN 2, BOX 540 SE-37123 Karlskrona SWEDEN
<i>Reference standards</i>	IMO Res. MSC.307(88)-(2010 FTP Code)

Issued in Genoa on August 12, 2020. This Certificate is valid until August 11, 2025

RINA Services S.p.A.

Enrico Cabella

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TYPE APPROVAL CERTIFICATE
No. LAB167420CS/002
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Roxtec Sleeve it Marine Fire Collar
Product description

Devices for the passage of pipes and ducts through A Class bulkheads as described in the following tables; the devices consist of a stainless steel tubular casing, having length of 60 mm, fixed to the steel bulkhead plate tack welding or bolting the collar tabs or the continuous flange. 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 used to secure the casings around the pipes.

Plastic pipes - A-60 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
from 16 up to 50	Exposed or unexposed	TRP 345 – 1.8 mm	from 2 up to 3
from 51 up to 225	Exposed or unexposed	INTUMEX L - 2.5 mm	from 3 up to 8

Plastic pipes - A-0 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
16	Exposed or unexposed sealed by means of ROXTEC Fire Sealant	TRP 345 – 1.8 mm	2
from 17 up to 48	Exposed	TRP 345 – 1.8 mm	3

PE-ALU-PE pipes - A-60 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
16	Exposed	TRP 345 – 1.8 mm	2
63	Exposed or unexposed Additional insulation - non combustible mineral wool cylinder, thickness 100 mm, density of 100 kg/m ³ and height of 250 mm	INTUMEX L - 2.5 mm	3

PE-ALU-PE pipes - A-0 Class

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
16	Exposed or unexposed	TRP 345 – 1.8 mm	2
from 32 up to 63	Exposed or unexposed	INTUMEX L - 2.5 mm	3

TYPE APPROVAL CERTIFICATE**No. LAB167420CS/002****Enclosure - Page 2 of 3****Pre-insulated thermoplastic pipes - A-60 Class**

DIAMETER (mm)	INSTALLATION ON EXPOSED SIDE / UNEXPOSED SIDE	INTUMESCING MATERIAL TYPE AND THICKNESS	NO. OF LAYERS OF INT. MATERIAL
75	Exposed Additional insulation - non combustible mineral wool cylinder, 2 layers, thickness 45+45 mm, density of 90 kg/m ³ and total height of 300 mm from the bulkhead plate	INTUMEX L - 2.5 mm	4
315	Exposed Additional insulation - non combustible mineral wool cylinder, 2 layers, thickness 45+45 mm, density of 90 kg/m ³ and total height of 300 mm from the bulkhead plate	INTUMEX L - 2.5 mm	10

Notes:

- two pipes, 160 mm diameter PB and 16 mm diameter uPVC fitted with Sleeve-it pipe seals and Sleeve-it intumescent sealant, were subjected to a hydrostatic test and an air pressure test respectively at 1 bar and 0.02 bar and no leakage was reported after 30 minutes, as detailed in the DNV Test Report No. LDN-08-045 dated 31 January 2008.
- two fire collar incorporating intumescent seal and elastomer pipe sealing ring (Sleeve-it drawing No. SI/09/031 Rev. A dated 25 August 2009) having diameter of 16 mm and 110 mm, were subjected to a hydrostatic test and an air pressure test respectively at 3.5 bar and 1 bar and no leakage was reported after 30 minutes, as detailed in the Lloyd's Register Certificate No. SOU 0901586/1 dated 8 January 2010.

Field of application

Fire resistant plastic pipes, PE-ALU-PE pipes and pre-insulated thermoplastic pipes penetration through A Class bulkheads.

Reference documents

Drawings as included in Test Reports issued by:

- Warringtonfire - No. 164476 B, No. 314670, No. 303585 A, No. 183387 A, No. 316943, No. 309855 A, No. 337717, No. 307171 A
- CTO S.A. - No. RS-19/B-423/E, No. RS-19/B-424/E
- RISE - No. 7P02024
- DBI - No. PGA10870A

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Tests carried out

Tests as per Test Reports issued according to IMO FTP Code:

- Warringtonfire No. 164476 B dated 23 July 2007
- Warringtonfire No. 314670 dated 25 June 2012
- Warringtonfire No. 303585 A dated 7 April 2011
- Warringtonfire No. 183387 A dated 23 October 2009
- Warringtonfire No. 316943 dated 26 April 2012
- Warringtonfire No. 309855 A dated 23 December 2011
- CTO S.A. No. RS-19/B-423/E dated 19 November 2019
- RISE No. 7P02024 dated 8 June 2017
- DBI No. PGA10870A dated 13 December 2016
- Warringtonfire No. 337717 dated 13 May 2014
- Warringtonfire No. 307171 A Issue 2 dated 17 June 2011
- CTO S.A. No. RS-19/B-424/E dated 27 November 2019

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.

This certificate annuls and replaces the certificate No. LAB174915CS/002 dated 15/9/2015 due to renewal.

Genoa August 12, 2020

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