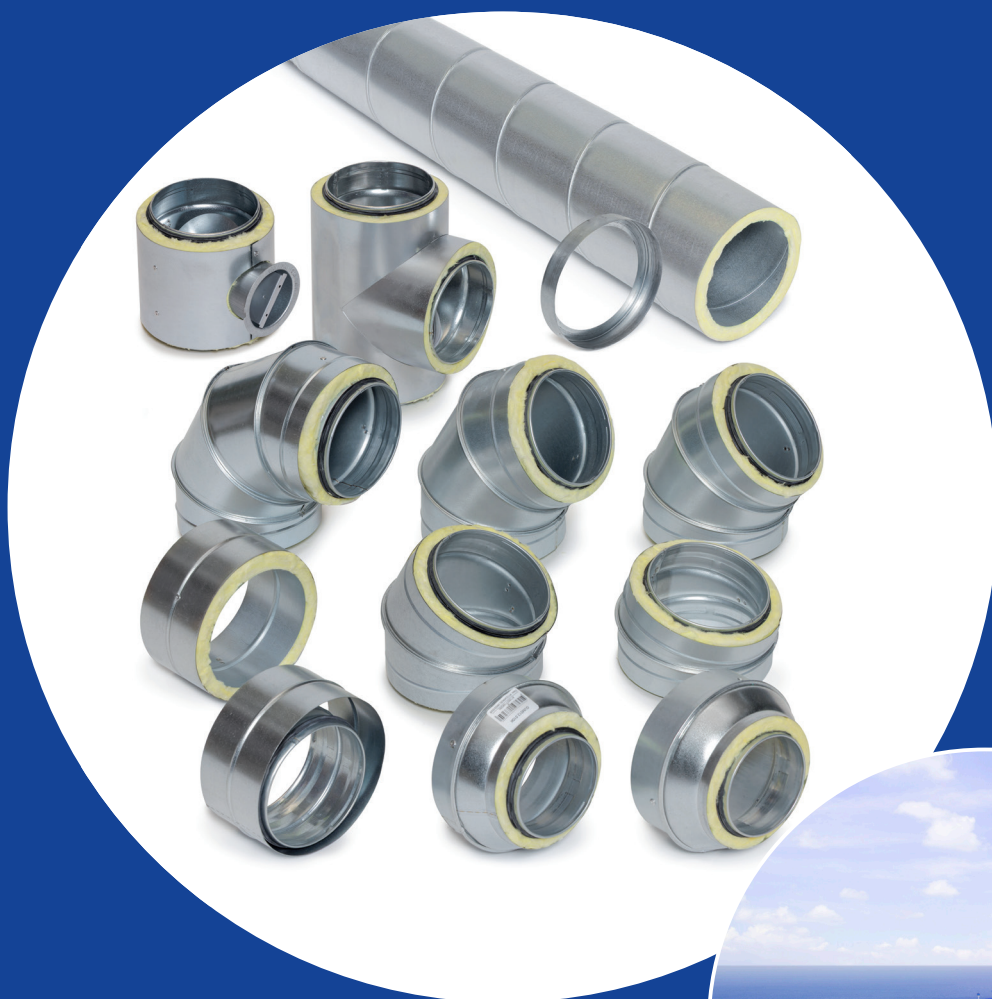




VENTILATION DUCTS & FITTINGS



**Marine
ducts & fittings**



AIR
SPIRALO®

VENTILATION DUCTS & FITTINGS

Air Spiralo - DEC Group One-Stop-Shop Marine ventilation solutions

The Air Spiralo - DEC Group offers you a one-stop-shop combination in the marine shipbuilding industry for galvanized and flexible ventilation ducts & fittings and silencers.

The Air Spiralo - DEC Group develops, manufactures and markets a wide range of ventilation ducts and fittings in galvanized steel and flexible materials. In addition, the Air Spiralo - DEC Group has the widest range of silencers for the ventilation industry. The Group holds an extensive set of certificates and quality marks for all applications.

With an extensive sales and distribution network, the Air Spiralo - DEC Group supports and supplies their customers throughout Europe according to the one-stop-shop principle.

Marine galvanized and flexible ducts and fittings - all under one roof

- Galvanized circular ducts and fittings: pre-insulated and non-insulated
- Flexible ducts: insulated
- Products meet the highest quality standards and are certified
- An innovative inventory and warehouse management system and modern ICT solutions to support your logistics process
- Partnership, reliability and quality are the core values of our international business operations
- We strive to integrate as many sustainable methods as possible within operational processes

www.airspiralo.com

www.decinternational.com

Air Spiralo - DEC Group

One-Stop-Shop

Marine galvanized

and flexible, ducts

and fittings

Marine - Ducts and fittings - Insulated



Insulated Spiralo duct Marine L=3000 SPIRALO



Flexible duct Marine L=3000 SPIRALO



Cover for Marine ducts SPIRALO



Insulated pressed bend 90° R=1xd Marine KEN-LOK



Insulated pressed bend 60° R=1xd Marine KEN-LOK



Insulated pressed bend 45° R=1xd Marine KEN-LOK



Insulated pressed bend 30° R=1xd Marine KEN-LOK



Insulated pressed bend 30° R=1xd Marine KEN-LOK



Insulated pressed reducer male/male Marine KEN-LOK



Insulated pressed reducer male/female Marine KEN-LOK



Insulated T-piece 90° Marine KEN-LOK



Insulated single blade damper with adjustment cup Marine KEN-LOK



Insulated coupling male Marine KEN-LOK



Insulated coupling female Marine KEN-LOK

Marine - Ducts and fittings - Uninsulated



Spiralo duct L=3000
SPIRALO



Pressed bend 90° R=1xd
KEN-LOK



Pressed bend 60° R=1xd
KEN-LOK



Pressed bend 45° R=1xd
KEN-LOK



Pressed bend 30° R=1xd
KEN-LOK



Pressed bend 15° R=1xd
KEN-LOK



Pressed reducer male/male
KEN-LOK



Pressed reducer male/female
KEN-LOK



3-piece 90° KEN-LOK



Single blade damper with
adjustment cup KEN-LOK



Silencer KEN-LOK



Coupling male KEN-LOK



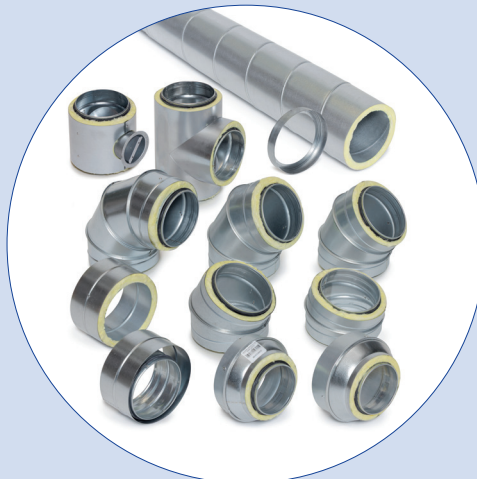
Coupling female

Marine - Ducts and fittings - Insulated

Insulated Spiralo duct Marine L=3000 SPIRALO	SPBM
Flexible duct Marine L=3000 SPIRALO	FLEXMI
Cover for Marine ducts SPIRALO	EBSRN
Insulated pressed bend 90° R=1xd Marine KEN-LOK	GBM9
Insulated pressed bend 60° R=1xd Marine KEN-LOK	GBM6
Insulated pressed bend 45° R=1xd Marine KEN-LOK	GBM4
Insulated pressed bend 30° R=1xd Marine KEN-LOK	GBM3
Insulated pressed bend 30° R=1xd Marine KEN-LOK	GBM1
Insulated pressed reducer male/male Marine KEN-LOK	GVM
Insulated pressed reducer male/female Marine KEN-LOK	GVHM
Insulated T-piece 90° Marine KEN-LOK	RTM9
Insulated single blade damper with adjustment cup Marine KEN-LOK	KMM
Insulated coupling male Marine KEN-LOK	SVM
Insulated coupling female Marine	SVHM

Marine - Ducts and fittings - Uninsulated

Spiralo duct L=3000 SPIRALO	SPB
Pressed bend 90° R=1xd KEN-LOK	GB9
Pressed bend 60° R=1xd KEN-LOK	GB6
Pressed bend 45° R=1xd KEN-LOK	GB4
Pressed bend 30° R=1xd KEN-LOK	GB3
Pressed bend 15° R=1xd KEN-LOK	GB1
Pressed reducer male/male KEN-LOK	GV
Pressed reducer male/female KEN-LOK	GVH
T-piece 90° KEN-LOK	RT9/T9
Single blade damper with adjustment cup KEN-LOK	KLM
Silencer KEN-LOK	CSRPF
Coupling male KEN-LOK	SV
Coupling female	SVH



Page 1 / 3




Certificate number: SMS.MED2.D/50525/02.D.0

File number: AC1000/453/001

Item number: MED/3.13

USCG Module B number: 164.109 / EC2690

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

Notified Body N° 2690

MED 2014/90/EU QUALITY SYSTEM MODULE D CERTIFICATE

This certificate is issued under the French Maritime Authority, in compliance with the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2022/1157 of 4 July 2022

DUTCH ENVIRONMENT CORPORATION B.V.
IR. HANLOSTRAAT 19-22, PO BOX 35, 7500 AA, ENSCHEDE, NETHERLANDS

for the type of product
NON-COMBUSTIBLE MATERIALS
SURFACE MATERIALS AND FLOOR COVERINGS WITH LOW FLAME-SPREAD CHARACTERISTICS: DECORATIVE VENEERS

Summary of the range of the recognition which is detailed in the subsequent page(s):
NON-COMBUSTIBLE MATERIALS
SURFACE MATERIALS AND FLOOR COVERINGS WITH LOW FLAME-SPREAD CHARACTERISTICS: DECORATIVE VENEERS

This certificate is issued to attest that Bureau Veritas Marine & Offshore, notified body number 2690, did undertake, at the above company's request, an assessment of the quality system for production quality assurance related to the equipment of the type described in EC type-examination (Module B) certificate(s) listed in the subsequent page(s). Bureau Veritas Marine & Offshore, notified body number 2690, has considered that the quality system operated was satisfying the applicable requirements of the Marine Equipment Directive 2014/90/EU as amended.

This certificate will expire on: 12 Mar 2023

For Bureau Veritas Marine & Offshore,
At BV ROTTERDAM, on 13 May 2022,
Jan LEUTEN

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <https://www.veristatmb.com/veristatmb/jsp/viewPublicPdfRecognition.jsp?id=vs0ldldw>
BV Mod. Ad.E 618-D June 2017

This certificate consists of 3 page(s)

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Certificate number: 12207/E0 MED

File number: AC1000/453/001

Item number: MED/3.13

USCG Module B number: 164.109 / EC2690

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2022/1157 of 4 July 2022

This certificate is issued to:
DUTCH ENVIRONMENT CORPORATION B.V.
ENSCHDE - NETHERLANDS

for the type of product
NON-COMBUSTIBLE MATERIALS
Dexflex SW and TW / Selflex SW and TW

Requirements:
SOLAS 74 convention as amended, Regulations II-2/3, II-2/5, II-2/9, X/3
IMO Res. MSC.36(63) (1994 HSC Code)- as amended, 7
IMO Res. MSC.97(73) (2000 HSC Code)- as amended, 7
IMO Res. MSC.307(88) (2010 FTP Code)-

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate is a renewal of certificate N° 12207/DO MED expiring on 22/04/2023

This certificate will expire on: 08 Dec 2027

For Bureau Veritas Marine & Offshore Notified Body 2690,
At BV GRONINGEN, on 08 Dec 2022,
Olaf RUITER

This certificate was created electronically and is valid without signature



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark (E)) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex I of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.
This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 536 June 2017

This certificate consists of 2 page(s)

Page 1 / 3




Certificate number: 13077/E0 MED

File number: AC1300/206/001

Item number: MED/3.18a

USCG Module B number: 164.112 / EC2690

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2022/1157 of 4 July 2022

This certificate is issued to:
DUTCH ENVIRONMENT CORPORATION B.V.
ENSCHDE - NETHERLANDS

for the type of product
SURFACE MATERIALS AND FLOOR COVERINGS WITH LOW FLAME-SPREAD CHARACTERISTICS: DECORATIVE VENEERS
Flexible ducts, type:
- "Aludec AA3"
- "Aludec 245"
- "Aludec 270"
- "Aludec 112"
Restricted application, see § 4.1

Requirements:
SOLAS 74 convention as amended, Regulations II-2/3, II-2/5, II-2/6, II-2/9, X/3
IMO Res. MSC.36(63) (1994 HSC Code)- as amended, 7
IMO Res. MSC.97(73) (2000 HSC Code)- as amended, 7
IMO Res. MSC.307(88) (2010 FTP Code)-
IMO MSC/Circ.1120

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate is a renewal of certificate N° 13077/DO MED expiring on 13/01/2023

This certificate will expire on: 08 Dec 2027

For Bureau Veritas Marine & Offshore Notified Body 2690,
At BV GRONINGEN, on 08 Dec 2022,
Olaf RUITER

This certificate was created electronically and is valid without signature



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark (E)) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex I of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.
This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristatpm.com/veristatpm/jsp/viewPublicPdfType.jsp?id=ypszjzkb>
BV Mod. Ad.E 536 June 2017

This certificate consists of 3 page(s)

Page 1 / 3




Certificate number: 13125/E0 MED

File number: AC1000/453/002

Item number: MED/3.18a

USCG Module B number: 164.112 / EC2690

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2022/1157 of 4 July 2022

This certificate is issued to:
DUTCH ENVIRONMENT CORPORATION B.V.
ENSCHDE - NETHERLANDS

for the type of product
SURFACE MATERIALS AND FLOOR COVERINGS WITH LOW FLAME-SPREAD CHARACTERISTICS: DECORATIVE VENEERS
Non-combustible ducts with low flame-spread membranes, type SONODEC / ISODEC / ISOSLEEVE

Requirements:
SOLAS 74 convention as amended, Regulations II-2/3, II-2/5, II-2/6, II-2/9, X/3
IMO Res. MSC.36(63) (1994 HSC Code)- as amended, 7
IMO Res. MSC.97(73) (2000 HSC Code)- as amended, 7
IMO Res. MSC.307(88) (2010 FTP Code)-
IMO MSC/Circ.1120

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate is a renewal of certificate N° 13125/DO MED expiring on 15/01/2023

This certificate will expire on: 08 Dec 2027

For Bureau Veritas Marine & Offshore Notified Body 2690,
At BV GRONINGEN, on 08 Dec 2022,
Olaf RUITER

This certificate was created electronically and is valid without signature



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark (E)) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex I of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.
This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristatpm.com/veristatpm/jsp/viewPublicPdfType.jsp?id=ashipqjlt>
BV Mod. Ad.E 536 June 2017

This certificate consists of 3 page(s)

Marine ducts and fittings High-quality ventilation products

For over 50 years, we have been manufacturing ventilation products in-house using state-of-the-art production lines. Our marine range is based on our well-known products and meets the highest quality standards.

These are the international standards that our ventilation products comply with:

Ducts

NEN-EN 1506:2007 - NEN-EN 12237:2003 - NEN-EN 10346:2015

Fittings

NEN-EN 1506:2007 - NEN-EN 12237:2003 - NEN-EN 10346:2015

Dampers

NEN-EN 1506:2007 - NEN-EN 10346:2015 - NEN-EN 1751:2014

Silencers

NEN-EN 1506:2007 - NEN-EN 7235:2009

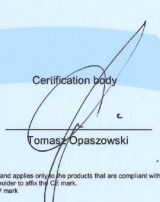
NEN-EN 10346:2015 - NEN-EN 15727:2010

Scan the QR-code to view all certificates on our website:

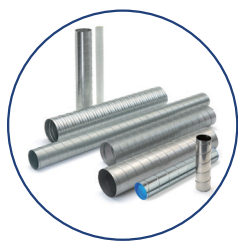


Sustainable production for a healthy and comfortable living environment

The Air Spiralo DEC Group holds an extensive set of certificates regarding corporate social responsibility and environmental care.

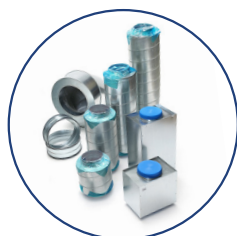
CERTIFICATE		
No.: TM 61000595.002		
	License holder Kennemer Schagen Industries B.V. Lagedijkweg 15 1742 NB Schagen The Netherlands P.O. Box 51, 1740 AB Schagen	Manufacturing Plant Air Spiralo Poland Sp. z o.o. St. Składowa 5 64-500 Szamotuły – Poland
Project number 26100650	Our reference SD/64957876	Period of validity from 11.03.2022 to 10.03.2027
Basis of research - NEN-EN 1506:2007 - Ventilation for buildings - Sheet metal air ducts and fittings with circular cross-section - Dimensions - NEN-EN 12237:2003 - Ventilation for buildings - Ductwork - Strength and leakage of circular sheet metal ducts - NEN-EN 10346:2015 - Continuously hot-dip coated steel flat products for cold forming - Technical delivery conditions		
TÜV Rheinland Polska Sp. z o.o. declares that the product described below meets the requirements contained in the reference documents:		
Ventilation elements with coating Z275		
(Details in the attachment to the certificate.)		
TÜV Rheinland Polska Sp. z o.o. ul. Wolności 347, 41-800 Zabrze, Polska Tel.: +48 32 271 64 89 e-mail: post@pl.tuv.com		Certification body  Tomasz Opaszowski
Zabrze, 11.03.2023 This certificate is subject to the Certification Terms and Conditions and the TÜV TRP General Transaction Conditions and applies only to the products that are compliant with the standard used for compliance assessment. This certificate alone does not entitle the holder to affix the CE mark. This certificate entitles the holder to affix the product with the TÜV mark.		
 Safety Regular Production Surveillance www.tuv.com ID: 0000083090		 TÜVRheinland® Precisely Right. www.tuv.pl

Spiralo ducts



Circular fittings

Fire dampers



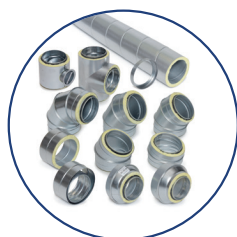
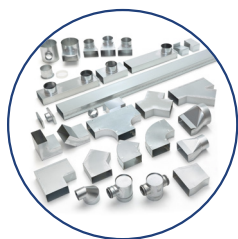
Silencers

Dampers



Damp proof

Rectangular



Marine



Scan the QR code to view
the Air Spiralo product assortment



Air Spiralo BV
Lagedijkweg 15, 1742 NB Schagen
The Netherlands

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sales@airspiralo.com
www.airspiralo.com

Member of Air Spiralo - DEC Group