





# **CERTIFICATES**

# RISE - Research Institutes of Sweden AB Certification (former SITAC)

Air Tightness Certificate for Ventilation Ductwork System - air tightness class D according to EN 12237:2003 - round spiral ducts and ductwork fittings with seals.





### The Building Information Foundation RTS sr

M1 Cleanliness class for air handling components:

- Ventilation spiral ducts
- Pressed bends, reducers, T-pieces and take-offs
- Segmented bends, reducers, T-pieces, take-offs, male couplings, offsets
- Air dampers: regulating, shut-off, iris, multi blade



### **TÜV Rheinland Polska**

Certificate of production quality:

- · Round ventilation ducts and fittings
- · Mounting accessories



# Instytut Techniki Budowlanej ITB (The Building Research Institute)

Technical approvals and certificates of constancy of performance

- STRUT assembly system
- Suspended mounting elements
- Flexible ducts fire classification
- Fire dampers



### **Passive House Institute**

ZX



### **EcoDesign Directive Compilance**

Alnor Systemy Wentylacji meets the requirements of ErP2018 Directive introduced by the EU Commission Regulation no. 1253/2014 regarding ecodesign requirements for ventilation units. The regulation has been in force since January 1, 2016, and from January 1, 2018 its requirements have been tightened.



# **CERTIFICATES**

### Prüfstelle HLK Universität Stuttgart

The "push-pull" decentralized heat recovery units with a ceramic heat exchanger have been tested according to the standard EN 13141-8: 2011.



### **TÜV SÜD Industrie Service**

Heat recovery units series HRU-MinistAIR-W-450 and HRU-MinistAIR-W-250 have been tested in accordance with the requirements of DIN-EN 308: 1997-06.



### **TÜV Rheinland Polska**

Certificate of the production quality:

- Regulating, shut-off, non-return and iris dampers
- Ventilation silencers





### Fraunhofer-Institut für Bauphysik

The SLC rectangular silencers have been tested in accordance with the requirements of DIN EN ISO 7235: 2010



### Institute of Power Engineering / Research Institute Thermal Technology Branch of "ITC" in Łódź

Aeroacoustic tests of SIL-50, SIL-100, SIBOL-100 silencers carried out in accordance with the standards:

- EN ISO 3471:2010
- EN ISO 7235:2009



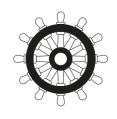


**Alnor Systemy Wentylacji** as a manufacturer after confirming the conformity of the product or its manufacturing process with the essential requirements, is required to issue a declaration of conformity (if the conformity assessment procedure is used) and affix the CE or B marking to a product.



# European Community Certificate of Conformity Issued in accordance with the Marine Equipment Directive

- MED certificate 164.112./1121/WCL MED0492TE
- MED certificate 164.112./1121/WCL MED0494TE
- MED certificate 164.112./1121/WCL MED0495TE
- MED certificate 114.478 Non-combustible insulation material



# **MATERIAL**

### **TYPES OF METAL**

#### **Galvanized steel**

Sheet thickness available : 0.4 / 0.5 / 0.6 / 0.7 / 0.9 / 1.2 mm. Zinc coating: Z275 or Z140

Other thicknesses available on request: 0.4-2.5mm. Offering depends on request quantity.

It is possible to perforate sheet metal with a thickness:  $0.5\,/\,0.6$  and 0.7 mm.

#### Stainless steel

- 1.4404/V4A/316L with increased corrosion resistance.
  Used in high humidity areas, e.g. in a swimming pools.
- Thicknesses available in stock: 0.6 and 0.8 mm.
- 1.4301 / V2A / 304: with high corrosion resistance for applications in the food industry. Thicknesses available in stock: 0.5 and 0.7 mm.

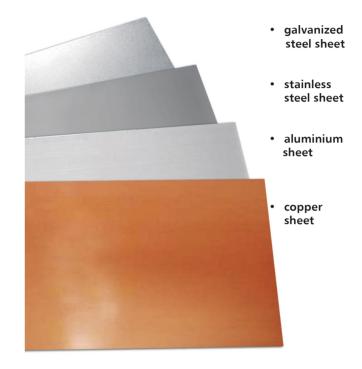
Other stainless steel grades, e.g. 1.4571 (with the addition of titanium), are available on request.

Aluminum sheet 1050A, temper H24 - much lighter than galvanized or stainless steel sheet metal, high corrosion resistance, including salt water. Thicknesses available in stock: 0.6 and 0.8

Aluzinc sheet available on request, with additional resistance to high temperatures up to  $300^{\circ}$ C.

### Copper sheet M1E z4

Cleaner air, free of bacteria is a result of the natural properties of material, like formation of patina which gives germicidal effect. This advantage is of essential importance for healthcare facilities or rooms used by allergy sufferers.



#### **TYPES OF PLASTICS:**

To better distinguish the materials that in their natural form are generally semi-transparent, we use standardized colours:

### PE - Polyethylene.

### PP - Polypropylene.

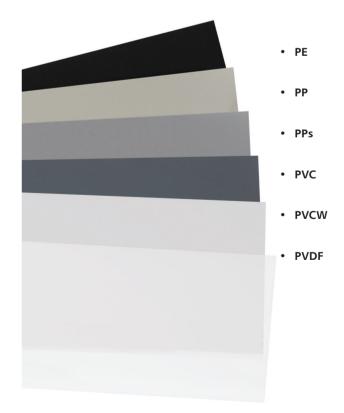
**PPs** – shares the basic characteristics of polypropylene (PP), but is also flame resistant and bears high resistance to temperature - the range of operating temperature scales from 0 to  $90^{\circ}$ C.

**PP-EL-s** – apart from having the same characteristics as PPs, it is also an electrically conductive material.

### PVC - polyvinyl chloride.

White PVC - PVC used for outdoors applications.

PVDF - Polyvinylidene fluoride.



# **PRODUCTS**

### **VENTILATION DUCTS (PIPES) WITH CIRCULAR CROSS-SECTION** SPIRAL®SYSTEM



SPR-C







SPR-FLS

Spiral ducts, perforated, with linear seamweld, butt weld and with FLS flanges or rolled-up edge for TRANS-Quick system.





SPR-C-WB

SPRP



SRGL



Wooden crates and metal racks, designed for storage and transport of spiral ducts.

### **VENTILATION BENDS WITH CIRCULAR CROSS-SECTION SPIRAL®SYSTEM**











BPL-...-15



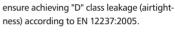












Pressed bends with seals. Bends with seals











Pressed bends without seals. Linear seamwelded ensures higher air-tightness of ductwork. Bends with safe-edge.









BPD-...-90



Bends made of stainless steel Stainless steel grades: 1.4301/304,









BPD-...-45

Long, pressed bends with radius 1.5D. Bends with seals ensure achieving "D" class airtightness according to EN 12237:2005.



BPKL-...-90





Short, pressed bends with radius 0.6xD. Fittings with seals.







Female and female-male, pressed bends

# **PRODUCTS**











Segmented bends with seals. Fabricated 4-5 segments. The inside surface of the hemmed seams is sealed.





BS-...-60







Segmented bends without seals. Bends can be made of stainless steel, aluminium or copper.



BSDL-...-90



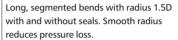
BSD-...-90



BSDL-...-45



BSD-...-45





BSKL-...-90



BSKL-...-60



BSKL-...-45



BSKL-...-30



BSKL-...-15

Short, segmented bends with seals and radius 0.6xD.



BSK-...-90



BSK-...-60



BSK-...-45



BSK-...-30



BSK-...-15

Short, segmented bends with radius 0.6xD.



ODSOL



**ODSO** 



ODSQL



**ODSQL** 



**ODSOQL** 

Offsets help routing ductwork around obstacles.

### **VENTILATION REDUCERS WITH CIRCULAR CROSS-SECTION SPIRAL®SYSTEM**



**RPCL** 



**RPC** 



**RPCFL** 



**RPCF** 



**RSCLFL** 





**RSCLL** 

**RSCL** 



RSLL

**RSL** 



**RSCLF** 



**RSLFL** 



RSLF

Pressed reducers with and without seals. Male and female-male ends.

Segmented reducers - diffusors and confusors.

Type: concentric and eccentric, with and without seals

Ends: male-male female-female

# **PRODUCTS**



**RSFCF** 



**RSFCL** 







**RSFC** 

Flat, segmented reducers - diffusors and confusors.

Type: concentric and eccentric, with and without seals

Ends: male-male female-male

### T-PIECES AND X-PIECES: SADDLE, ANGULAR, Y-PIECES **SPIRAL® SYSTEM**

**RSFCFL** 





SP



SPSL



SPS



**SPSM** 

Pressed and segmented collar saddles.



**SPSML** 







SSL



Segmented collar saddles for ventilation ducts.



**SSCCBL** 



**SSCCB** 



SSCFBL



**SSCFB** 

Segmented saddles - curved boots for spiral ducts and flat shoes for rectangular

ducts.



SSCVL-45



SSCV-45



TPCL1



TPCL<sup>3</sup>







TPC3

Collar saddles are available at angle from 30° to 80° for non-turbulent, smooth air flow.

Ventilation, pressed T-pieces and X-pieces with and without seals. Different types are available depending on the diameter.





**XPCL** 



XPC



TPCL-CP



TPC-CP



TPCL-CP-I



TPC-CP-I

Insulated reducing T-pieces with blind end cap used as an access door or a plenum box.

# **PRODUCTS**







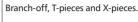
XSCL







Segmented T-piece and X-pieces. Concentric and eccentric versions. Versions with EPDM seals are available.













T-pieces and X-pieces with an angled outlet. Version with seals ensures class D

airtightness according to EN 12237:2005.



TSVL-45



TSV-45



XSVL-45



XSV-45

YSVL-45 YSV-45

Y-piece is used for the even air distribution in ventilation ductwork.

### **VENTILATION COUPLINGS**





NS



SNSL



MSF



SMSFL

Male, female and male-female couplings for spiral ducts and duct fittings

### TAKE-OFFS: SADDLE, ANGULAR, FLEXIBLE DUCT CONNECTORS









Round to rectangular pressed take-offs (branches). Available with and without seals.



ILSL



ILS



**ILSF** 



ILSVL-45



ILSV-45



TR6



**KILL** 



KIL

Flat, straight, pressed take-offs (branches). EPDM rubber seal meets requirements for air tightness class D according to EN 12237.

Square spigot plate joins circular duct with rectangular duct. Available angle branches.

# **PRODUCTS**



ASVL-45



ASV-45





Take-offs with mesh.



ILA-NS



**ILA-FLS** 



ILA-TK



ILA-NSL



ILA-NSL-HI-T

Flexible duct connector. Made of flexible fabric resistance to high temperatures, weather conditions and chemical substances.

#### **VENTILATION END CAPS**



CPSL



CPS



CPNF





Pressed end caps. Female and long versions are available. End caps fit ducts and fittings.



**CPFH** 





CS









CSHL



CSH

Segmented end cap. Female version available. End caps fit ducts and fittings.

End caps with a handle, fit spiral ducts.

# **PRODUCTS**

### **MOUNTING ACCESSORIES**



CLRL ≤400



CLR ≤400



CLRL >400



CLR >400

Suspension rings for round ducts. One-piece, two-piece, with or without vibration-damping EPDM rubber-inserts.



CLRL-C



**CLRU** 



PB

Perforated suspension tape designed for installation of round ventilation ducts.



**EQRS** 



**EQZS** 

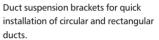




**EQLS** 



**EQLS-L** 



Duct suspension brackets are available in various types of steel.



**EQLS-S** 



**EQVS** 





**AMORT** 

Vibration-dampers used with ventilation duct suspension system. Made of EPDM, provided with a washer made of galvanized steel.



LDB-30-20



LDB-30-30



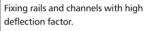
LDB-30-45



LDB-41-21



LDB-41-41





LDBST-41-21



LDBST-41-41



LDBDT-41-21-21



LDBDT-41-41-41



GPK



Z-LDB-30-20



Z-LDB-30-30



Z-LDB-30-45



Z-LDB-41-21



Z-LDB-41-41

Vibration-dampers for fixing rails. Attenuate noise generated between rail and duct.







**LDBSO** 



**LBBST** 



**LDBSG** 

W-LDB





Strut channels available in various types of zinc coatings or in raw steel.

Cantilever arms, base plates for strut channel and fixing rails.

# **PRODUCTS**



LDB-BE-41-1-1-R



LDB-BE-41-1-1



LDB-BE-41-1-3



LDB-BE-41-2-1



LDB-BE-41-2-2

90° angle fittings (brackets) for LDB STRUT



LDB-P-41-1



LDB-P-41-2



LDB-P-41-3



LDB-P-41-4



LDB-P-41-5

Flat plate fittings (brackets).



LDB-PC-41-3



LDB-PT-41-4



LDB-PK-41-5



LDB-PTRA-45-41-4

Flat plate cross and corner fittings (brackets) for joining LDB STRUT channels.



LDB-BTRA-41-3



LDB-PBTR-41-5



LDB-AN-TL-41-4



LDB-AN-TR-41-4

Angle fittings (brackets) for STRUT channel.



LDB-B-O-CLAMP-21



LDB-B-O-CLAMP-41







Clamps for suspending LDB fixing rails.



LDB-U-BCLAMP-82 LDB-U-BCLAMB





LDB-B-CLAMP



LDB-W-BCLAMB

Clamps for suspension of STRUT channels.









LDB-BAN-41-30-2 LDB-BAN-41-45-4 LDB-BAN-41-60-2 LDB-BAN-41-120-2









LDB-Z-82-4

Angular fittings (brackets) for cross joining of STRUT channels.



LDB-U-21-3



LDB-U-41-3



LDB-U-41-6



LDB-DCB-41-4

Fittings (brackets) cross joining of STRUT channels.

# **PRODUCTS**







LDB-STP-AN-41-3 LDB-PFIX-41-4-TOP LDB-STP-82-6-2

Base plates for STRUT channel.







LDB-CHTB-41-6-2

LDB-EXT-U-21-4 LDB-EXT-U-41-4

Highly loadable external couplers for LDB STRUT channel.





Adjustable brace for STRUT channel.









Slide nuts for Strut channel, nuts with large washers







SNP-0806-SR-NK



SRS









Various types of screws, nuts and washers.

Threaded rod. Size: M6-M12 Coupling nuts for threaded rod. Beam clamps for threaded rod.

installing drop-in anchors.











PG



NZO

B-CLB

















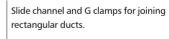


TK-DOB









Wall plugs and drop-in anchors for threaded rod and dual thread dowel screw bolts. It is recommended to use a TK-DOB driver for







WGO-IB



Various types of self-drilling screws. It's recommended to use dedicated bit tip holder for driver.



WGO-KZ

WGO-KL-NK

# **PRODUCTS**











Tightening bands (duct straps) for flexible ducts. Available also in rolls with a set of band clips.





Sealing and fastening clamps for joining ductwork components.

### **ROOF INSTALLATION ACCESSORIES**















PD-EPDM-S0 PD-EPDM-S

Roof flashings to seal around the roof penetration openings.





ST-ROF-AW-330





Support roof feet.







ST-ROF-AWL

ST-ROF-MAT

Absorbing adjustable feet an anti-vibration mats for roof feet.









Sets of roof supports and frames for installation of ventilation ductwork and any type of equipment mounted at building roofs.

# **PRODUCTS**

### **DUCTWORK PREFABRICATED COMPONENTS**



NQ-C-20K



NQ-C-20



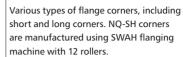
NQ-C-20-2,5



NQ-C-20L



NQ-C-30





NQ-C-40



NQ-C-20-SH



NQ-C-20L-SH



NQ-C-30-SH



NQ-C-30L-SH



PQ



PQ-SIL



NI-AKB-70

Standard flange profile and with injected sealant for rectangular duct production. Widths: 20, 30 and 40mm. Manual riveter.



AMT



AMT-K



AMT-HI-T



AMT-PU



AMT-NEP

Flexible duct connector (a joint consisting of a layer of fabric and two strips of sheet metal on both sides), available in galvanized steel and stainless steel, resistance to high temperatures, chemical substances and aging.



PRQ



WKK-PVC



WKK-OCY



RURA i dybel WKD



WKT

Turning vane guides and reinforcing rod and dowel for rectangular ventilation ducts and fittings of large sizes.





SIA



SIA-K



PRET



KIT-DSKS



KIT-DSKKS



KIT-DS



KIT-DS-H



KIT-DS-M



KIT-DS-JDS



KIT-DS-PVC

Flat circular flanges for circular ducts, intake and exhaust roof vents. Wire mesh netting protects from impurities.

Ventilation damper mechanisms.

Available in insulated and stainless steel versions.

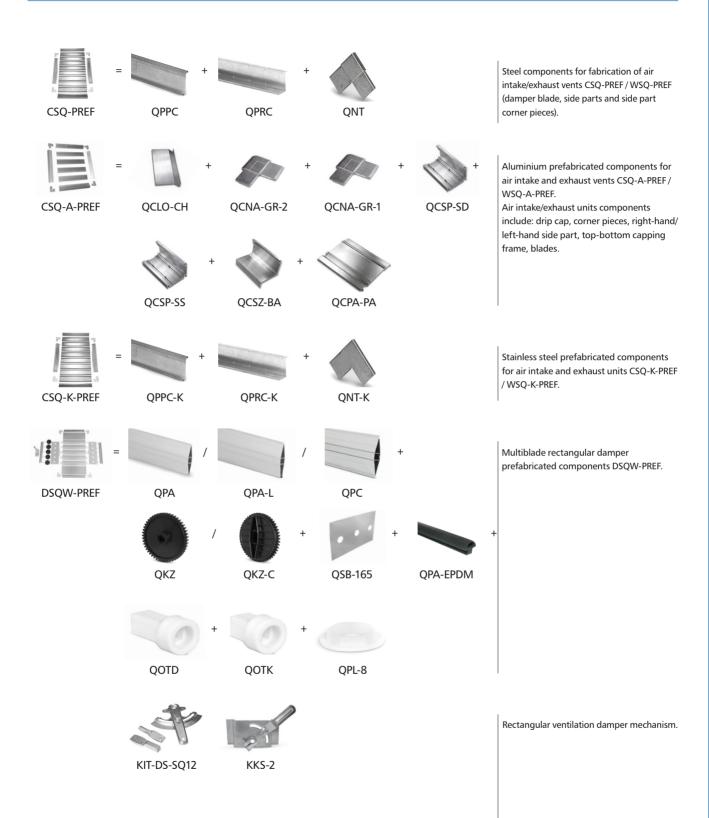
Damper mechanism control lever or actuator coupling for ventilation damper mechanisms.

Plastic damper mechanisms.



Damper mechanism available in galvanized steel, stainless steel and aluminum.

# **PRODUCTS**



# **PRODUCTS**



Aluminium rectangular damper prefabricated components DSQW-A-PREF.

Aluminium damper components include: damper blade, end caps, top/bottom frame, right-hand/left-hand side part, gaskets, actuator mount, drawn bar.

# **PRODUCTS**

#### **VENTILATION DUCT ENDS TRIM**



KW-RM



KW-RM-9010



KW-RML-9010



KWI



KWI-RMI



Air valves can be powder-coated in any RAL colours, standard colour: RAL 9016.



KW-K-RM



KWO-RML



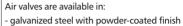
KWO-RM-SE



KWV-RM



KN-RM



stainless steel



KN-RM-9010



KN-RML-9010



KNI



KNI-RMI



KNV-RM



KN-K-RM



KNT-RML



KNT-RM-SE





RML



RM-SE



**RMD** 



**RMDL** 

Mounting frames for air valves. Available in long and stainless steel version.



RM

ROZ-H



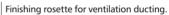
ROZ-H (fi>200)



ROZ-P



ROZ-P (fi>200)







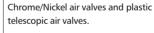
KPP



ELZ



ELZ-I





**UELA** 



**UELA-AL** 





Wall mounted intake and exhaust grilles. Available also with drip nose.



USAV



# **PRODUCTS**



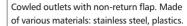




USMS-P



HISM





USUF



USAR



ULMA

External grilles for finishing ductwork and aluminum floor grilles.

Supply/extract grilles. Available also with a

damper for a direct assembly on the round

Supply/extract grilles. Available also with a damper for a direct assembly on the rectangular duct. It's recommended to use

Square cone diffusers and dedicated air

Available insulated plenum boxes with side or top inlets. What's more, plenum boxes can be supplied with a damper.

a mounting frame for installation.

duct.

dampers.







SGR-1





SHR



SHR-DAW



SHR-RM



NCD-S



NCD-S-DA



PRK-B



PRK-B-I



PRK-G-D



PRK-G-D-I



NKSD-C 298-8



NKSD-C 396-16



NKSD-C 498-24



NKSD-C 598-24



NKSD-C 598-48

Ceiling swirl diffusers - with various

number of plastic blades.

Diffusers are mounted to the air duct system with plenum box in a suspended ceiling.

Used for low and medium pressure, supply ventilation systems.

The diffusers are light and easy to install what eliminates a necessity of reinforcing the construction of suspended ceiling.



NKSD-CB



NK-SWB



RVA



RVA-45



NK-SWA-300



NK-SWA-400



NK-SWA-500



NK-SWA-600



NK-SWA-625



# **PRODUCTS**







Plenum boxes for supply and extract air diffusers RVA, NKSD-C, NKSD-CB, NK-SWB.





Plenum boxes for NK-SWA diffusers. Top/ side inlet connection. With insulation layer and/or damper.





PRR-B-I



NKSD-R-600

PRR-B-D

Swirl diffusers with round face panel. Features adjustable plastic vanes/ blades to set direction of uniform air pattern.









Plenum boxes PRR-SD-R for NKSD-R diffusers in low and medium pressure ventilation systems.













PRR-SD-R-B-D-I



RM-NCD









PRO

Circular cone diffusers. For assembly, it's recommended to use plenum box or mounting frame in order to connect the diffuser to a duct or a fitting.









As a standard plenum boxes have top/side inlet connection. Available also versions with insulation and/or damper.





Ball jet diffusers with adjustment angle of the outlet .



LDS-1

LDS-3-0



LDS-2-B





LDS-3-B





LDS-2-0



PR-LDS

Linear slot diffusers, available version for self-assembly of diffusers of various lengths.

Dedicated plenum boxes for diffusers ensure even airflow.

Side connection of the plenum box to duct. Available also versions with insulation and pre-installed damper.

LDS-2-C/LDS-3-C

# **PRODUCTS**





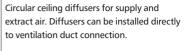








DKF-L





GCR



GCR-L



GCR-P



GCR-LP

Swirl diffusers for supplying cold air. The diffusers are intended for room up to 4m high, e.g. hotels and office buildings.



AKL



**AKP** 







CSQ-A



CSQ-K



WSOQ



**DSQOW** 

Square ceiling diffusers for supply and extract air. Diffusers can be installed directly to ventilation duct connection.

Wall-mounted air intake, exhaust and nonreturn exhaust air vents. Made of galvanized steel, aluminum and stainless steel.



CSQ

QILN

Wire mesh with a frame made of PQ flange profile. It can be mounted on the intake/ exhaust vents in order to prevent the impurities from entering the ductwork.

# **PRODUCTS**

### **VENTILATION SILENCERS**



SIL-50



SIL ≥Ø355



SIBRL



SIBOL



SIRL

Silencers (attenuators) for circular ductwork systems. Insulation material: mineral wool

Insulation thickness: 50 mm or 100 mm Connection type: male or female The diameter sizes > 315 mm require ordering the NSL male couplings.



SIL-GL



SI-GL



SQLL-25



SQLL-50



SQLL-CR



SQLL-CRQ



SQQL-30









**BSIL** 



**SLEFL** 



SLEFL-P



SLEAL



Silencers with a steel rectangular casing made of rectangular duct and inner perforated cladding.

Additional mineral wool insulation is available, with a slanted veil so that it is increases the sound-absorbing surface of the silencer.



**SLESD** 

Attenuating bends and flexible silencers. Various materials. Aluminum-polyester or polyethylene coating.

Silencers made of AlnoFlex duct, Aluduct or textile ducting.

Wool insulation of 25 mm thickness. Available version with EPDM seals.



**SLEAF** 



SLEFD



**SLEST** 



SRC



SPC



K-SLC



K-SRC



K-SPC

Silencers for rectangular ductwork. The silencers consist of the casing and baffles.

Different types of baffles: absorption baffles, absorption-resonator baffles, absorption-resonator-perforated baffles.

# **PRODUCTS**

### **FLEXIBLE DUCTS**





Semi-flexible ventilation ducting. Materials: aluminum and stainless steel.









Aluminum flexible duct - high temperature. Hygienic version is protected with an antibacterial coating..









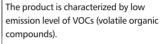


ALSD-L









The vapor barrier protects the wool against condensation formed by the temperature difference. Classified as low flammable.









ALAD-M-L





ALID-HY-L



Different materials and properties of flexible ducts: plastics, high temperature, with antibacterial coating, protected with vapor-proof foil, with the Marine certificate.

Insulated ventilation duct sleeves.

section.













VINYL-R-DUCT

VINYL-S-DUCT





The version with an inner PET liner below the insulating layer makes it easier to put the sleeve on a duct without any risk of pulling or ripping the mineral wool.

Ducts with round and rectangular cross-









# **PRODUCTS**

#### **FLX-REKU FLEXIBLE AIR DISTRIBUTION SYSTEM**



FLX-HDPE-63



FLX-HDPE-A-63



FLX-HDPE-75



FLX-HDPE-A-75



FLX-HDPE-90



FLX-HDPE-A-90



FLX-CS-PVC



FLX-CF-PVC

Plastic semi-rigid ducting for air distribution. Available version with inner antibacterial coating, meet the requirements of EN ISO 22196:2007. Diameters: 65, 75 and 90 mm.

Mechanical strength rating: 450 N. Temperature resistance: -20C to + 60C, class B2.

End caps for PVC semi-rigid ducts. End caps fit also plenum boxes



FLX-SGRL



FLX-PRO



FLX-PLO



FLX-PLO-L-75-2



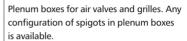
FLX-PLO-PL-75-2



FLX-PRO-L-63-3



FLX-PLO-MOV



Spigot diameters: 63, 75 and 90mm.

Available also insulated plenum box version - FLX-PRI. These plenum boxes have inside a insulation lining made from 9 mm thick rubber foam.



FLX-PRO-R



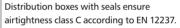
FLX-PRO-R



FLX-PRO-R-P



FLX-PRI-R





FLX-PLO-R



FLX-PLO-R



FLX-PLO-R-P



FLX-BP



FLX-RPC



FLX-RSCL



FI X-SI



FLX-SP

Fittings for a flexible air distribution system.



FLX-DAS



FLX-DAT



FLX-MSF



FLX-USZ



FLX-FAX

Shut-off, airtight dampers. Available diameters: 75 and 90 mm. Airtight dampers ensure the airtightness class C.

Female couplings, seals and mounting brackets facilitating the routing of ducting.

# **PRODUCTS**





FLX-SQOL-75-2

FLX-SQOL-75-1

Silencers for MVHR ducting systems. It's recommended to use it before a plenum box.



FLX-ODSQL-75-2

Offset plenum boxes for MVHR ducting systems. The plenum boxes with 1 or 2 FLX-HDPE duct connector spigots are available.





FLX-HDPE-132-52 FLX-CS-PVC-132-52

Oval ducting system for air distribution. End caps for ducts are also available.









FLX-PRV

FLX-PRV







FLX-PRV-100-1-F

FLX-PRV-125-1-1

FLX-PRV-125-2-F

Metal plenum boxes for supply and extract valves. Spigot diameter: 80, 100 or 125 mm.

Distribution boxes for oval ducts for singlefamily house. It's possible to hide the ducting in the ceiling or in the insulation layer.









FLX-VNS

FLX-VBH

Male couplings, vertical and horizontal bends for joining semi-rigid ducting.

# **PRODUCTS**

### **VENTILATION DAMPERS**



DARL



DAR



DARL-CV





DAR-PVC

Regulating dampers for circular ventilation ducts. Available diameters from 80 to 630 mm depending on the damper type.



DASL



DAS



DASL-CV



DAS-CV



DAS-PVC

Available versions with perforated blade.

Available in diameters from 80 to 630 mm. The damperblade position can be fixed with a screw.

Safe edges at the damper ends.



DAPL-CV



DAP-CV





DAT



DASL-B



DAS-B



DATL-B







DAOSL



DAOS



DAOSL-B



DAOS-B

Airtight shutoff damper. Meets requirements for class 4 airtightness acc. EN 1751. Available version with 50 mm insulation.

Dampers reinforced with a rod, making it possible to manufacture larger diameters up to Ø630 mm, while maintaining the rigidity of the construction.



GKL





**GKML** 



GKM

Non-return damper, prevent the air backdraft. Airtightness class D. Available also in larger diameters.



DATVTL



DATASL



DATVTML

Gate damper, hand-operated or with a pneumatic actuator. The sliding gate can open the passage to full clearance.

T-piece damper works like 3-way valve. The dampers are used e.g. for GCHX (ground-coupled heat exchangers).

# **PRODUCTS**





DASML-...-P







Dampers with mounting plates for actuators. Various damper types: regulating, airtight, with a bypass.

Lengthwise and crosswise actuator assembly available. All dampers can be provided with various types of actuators on request.







DATM-...-P









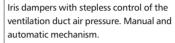


DASQL















DASQML



Round multi-blade dampers. Manual or automatic mechanism.



DSQ



**DSQW** 



Rectangular single-blade and multi-blade dampers. Available version made of aluminum.



DSQOW



Non-return multi-blade dampers. Available version made of aluminum.



CFR-PC-ABS-100



CFR-PC-ABS-150



CFR-PC-ABS-250

Constant Air Velocity (CAV) regulator automatically controls the volumetric air flow.



**RAVAV** 



RAVAV-I



**RACAV** 



RACAV-I



RAPAV

Advanced units for airflow regulation: VAV, CAV, PAV. The air flow rate setting of CAV regulators is protected against tampering with a dedicated wrench and nut.



RAVAV-Q



RAVAV-Q-I



**RACAV-NUT6** 



**RACAV-KEY** 

Air flow regulators are also available in rectangular version.

# **PRODUCTS**

### **SEALING PRODUCTS**











Sealing tapes used for HVAC applications (heating, ventilation and air-conditioning)

Various thicknesses, widths, temperature resistance and materials.

Available also reinforced sealing tapes with

















Nails for fastening thermal insulation. Various types: self-adhesive, welding, with perforated foot pins.











USZ-10







Duct seals are made of self-adhesive polyethylene strips used for rectangular ventilation ducts. Temperature resistance: 80°C.









Ceramic seals provide temperature resistance up to 1100°C.







SIL-AKR-SQ-5K







Acrylic sealant without harmful solvents or odours. Compound is waterproof.







Roof work and acetic sealants are intended for caulking the flashing sheets of roofs, patios, chimneys and all roof penetrations.





SIL-UNI-OCT-300 SIL-UNI-NAT-300



Fire-proof silicones are fully resistant on oils and changing weather conditions.

SIL-PPOZ-OCT-300 SIL-PPOZ-NAT-310











**PIS-PONT** 

Mounting foam, zinc sprays for steel protection and repair. Mounting foam gun and air operated pump.

# **PRODUCTS**

### **ACCESS DOORS & CLEANOUTS**











Access doors for circular and rectangular ventilation ducts, including insulated ones.







Flanged spigots and clamps for ventilation ductwork. The full range of diameters from

80 to 1600 mm.







End caps and access blind plug with handle. EPDM seals ensure class D airtightness.







BPBKCL-90

Cleanout (clearance) bends enable quick and easy cleaning of ductwork. Bends with or without seals.

### **ROOF COWLS, CURBS AND BASES**



PD-B1



PD-B2



PD-DRIP-T



PD-B3



Roof bases for round ventilation ductwork. Intended for flat and sloping roof.



**BAVE** 



COKD



COKD-I



WD-C2



WD-C2-MSF



WD-B





WD-C1

WD-D



WD-C1-MSF

WD-E



WD-E-RAL





VHLA



VHLA-S

VHLA-ST





WD-CS-PART

Circular roof exhaust vents. Flange, female

Roof curbs used as supports for PD-B1, PD-B2 and PD-B3 roof bases. Weather collars help seal roof penetration openings.

Roof vents are made of galvanized steel, stainless steel and aluminium.

or male connections.

The vents can also be painted in any RAL colour on special request.

Supply air/ exhaust air tower is manufactured of segments and it is designed to install directly on ventilation duct.

Roof vents can be equipped with an inner flange for drainage of water to the outside of the vent.

WD-CS

# **PRODUCTS**



**HAN-MSF** 





WD-TURBO-K





WD-TURBO-KNS

Roof turbine ventilators cap is mounted on top of chimney. Connection types: male, female and flange.



BSAVL-90



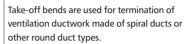
BSAV-90



BSILNL-135



BSILN-135





CD-O-P-NS



CD-S-P-NS



CD-P-P-NS



CD-C1



Roof cowls made of perforated metal sheet or with mesh. Roof cowls have few types of connection: flange, female or male.







air exhaust ends in round ventilation





PDQ-AII



CQKD



CDQ-A



CDQ-B



WDQ-A



WDQ-B



WDQ-E

Chimney ventilation cowls used for vertical ductwork.

Rectangular roof bases and curbs. Available also versions designed for sloping roofs.

Roof air intake units are used for rectangular ventilation ductwork. Top part of the intake is equipped with protection wire mesh.

Rectangular roof exhaust vents. WDQ-E features an inner water drain.



BFQN-135

Air intake and exhaust bend is used to terminate ventilation ducts. The bends are ended with protection mesh and blades.

# PRODUCTS

### **EQUIPMENT & ACCESSORIES**







HRU-WALL-100-25 HRU-WALL-150-60 HRU-WALL-150-60-RC

Push-pull, inside wall mounted, decentralized heat recovery unit. Ceramic core heat exchanger with thermal efficiency up to 82%.





HRU-WALL-CONTR HRU-WALL-CONTR-I





HRU-WALL-SEN-CO2 HRU-WALL-SEN-HY

CO, and humidity sensors as well as push button controller for HRU-WALL unit. Three speed modes and boost function available.





HRU-PremAir-350 HRU-PremAir-450 HRU-PremAir-500



PremAir App

Heat recovery unit with counterflow heat exchanger; thermal efficiency up to 93.4%. Certified component for passive houses.

The HRU-PremAIR can be controlled by an



HRO-PremAir-BUT-LM11



HRO-PremAir-BUT-LM04



HRO-PremAir-FILT-G4



HRO-PremAir-HRQ-PremAir-FILT-M5 FILT-F7



mobile application.



HRQ-PremAir-SENS-CO2



HRQ-PremAir-SENS-RH



HRQ-PremAir-**GATE** 



HRQ-PremAir-ANTENNA-EXT

A full range of dedicated accessories: controllers, filters and sensors, Automatic adjustment with stepless control (Demand Control Ventilation - DCV). Remote control possible by any CO, or RH wireless sensor



HRO-PremAir-HDE-160-1,5



HRU-MinistAir-W-250



HRU-MinistAir-W-450





MinistCONT-Man

F7 filter





**Humidity sensor** 



Room air humidity sensor



Duct CO, sensor



Room CO, sensor

Heat recovery units with thermal efficiency up to 90%. Airflow rates from 220 to 370 m<sup>3</sup>/h.

HDE-PremAIR electric heater for HRV.

Wired and wireless (Wi-Fi) controls for heat recovery unit.

Adjustable operation time by week timer.

Available fine filters for allergy sufferers.

Support humidity and CO<sub>2</sub> sensors.

# **PRODUCTS**









HRU-ERGO-250

HRU-ERGO-350

HRU-ERGO-500

HRU-ERGO-650

Low profile heat recovery units for under ceiling installation with exchangers for heat and moisture recovery. Wide range of model with max. airflow rates: 250/350/500/650/800/1000 m<sup>3</sup>/h





HRU-ERGO-800

HRU-ERGO-1000







**HRU-CONTR** 

HRU-CONTR-TPAD

HRE-ERGO

Controllers for heat recovery units. Counter-flow heat exchangers with heat and moisture recovery for various models.









CO, sensor

**Humidity sensor** 

HDE-CO

Accessories for the heat recovery unit - CO, and humidity sensors. It's possible to connect a pre-heater or secondary heater.





HE-HDW

Water duct heaters. Suitable for duct installations with a diameter of 100-500 mm. Coil heat exchangers can be sold separately.









2-way valve

3-way valve

CQ230A actuator

TRY230 actuator

Accessories for water heaters. It is possible to connect a 2-way or 3-way valve with the actuator and with thermostat.





Indoor thermostat

AKF10 duct air temperature sensor





HDE

HDE-CO













Accessories for electric heaters: regulators, thermostats and duct sensors

Electric duct heaters. Available versions: without contactor, with one contactor or

with two contactors.





R31 thermostat

TG-K330 temperature sensor

# **PRODUCTS**



Alnor actuator DM-ML-06



Alnor actuator DM-ML-08



Alnor actuator DM-FL-05



CM actuator



LMC actuator





NF actuator

Damper actuators. Different versions of power supply, torque and reaction time.

As standard, the actuators have a close-open or 3-step control (actuators with spring return only close open).

The actuators are equipped with a universal clamp which enables connecting to round and square rod.



LM actuator



NM actuator



SM actuator



LF actuator







DV-ROF-V



**DV-ROF-RHT** 

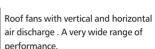


Round and rectangular duct fans. Capacity: 130-1300 m<sup>3</sup>/ h - round fan Capacity: 1150-3400 m<sup>3</sup>/ h - square fan











DV-REG-L-1



DV-REG-L-2,5



DV-REG-2



DV-REG-5

Speed controllers for fans. Surface or flush mounted. Permissible load from 1A to 5A.



PDI-BRF/ PDI-BRV



PDI-BRF-45/ PDI-BRV-45



PDI-S-BRF/ PDI-S-BRV



PDI-S-BRF-45 / PDI-S-BRV-45



PDI-S-BRF-45

Roof bases for fans. Wool insulation 30-50 mm. Adjustable angle to roof slope between 1-60 degree. Different heights.



PDI-BRF-PLATE -PDI-BRV-PLATE



PDI-BRF-KILL/ PDI-BRV-KILL



PDI-BRF-KILL-45 / PDI-BRV-KILL-45



PDI-BRV-KILL-UP

Mounting plates and duct stub connectors for SPIRAL duct and fans. Stub connector can be manufactured at an angle of 1-60 degrees.

# **PRODUCTS**

### **FIRE VALVES AND DAMPERS**





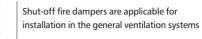




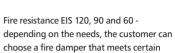


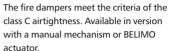
FDA2-12-T





FDA2-12-M











**FDMA** 

FDA-12-T FDA2-12-M







**FDMD** 

criteria.



CFDM





**FDMB** 



Smoke extraction dampers for ventilation systems. The fire dampers meet the criteria of the class C airtightness.





Set of fire damper and air valve joined with a casing.

CFDM-V-E

# **PRODUCTS**

### **INSULATION**







ARMAFLEX

FOAM-B

FOAM-G





FOAM-AB

FOAM-AG







The synthetic rubber foam. It is used for thermal and acoustic insulation

Different thicknesses of foams are available. One side can be self-adhesive and reinforced with a mesh. A version with an aluminum coating is also available.

### **AIR FILTERS**















FSBQ-I

FSBQ-W



**MOCarz** 







MOCarz-CA

MOCarz-W

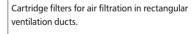
FSBQ-W-CA

Duct filters for air filtration. The filter housings allow for easy filter replacement and are

fastened with clamps.

Filter elements are available in filtration classes EU3 and EU5 in accordance with the new ISO 16890 standard. Filters in casing, pleated filters and with a protective wire are also available

It's recommended to install a smog filter on the supply ducts in domestic ventilation and heat recovery systems.

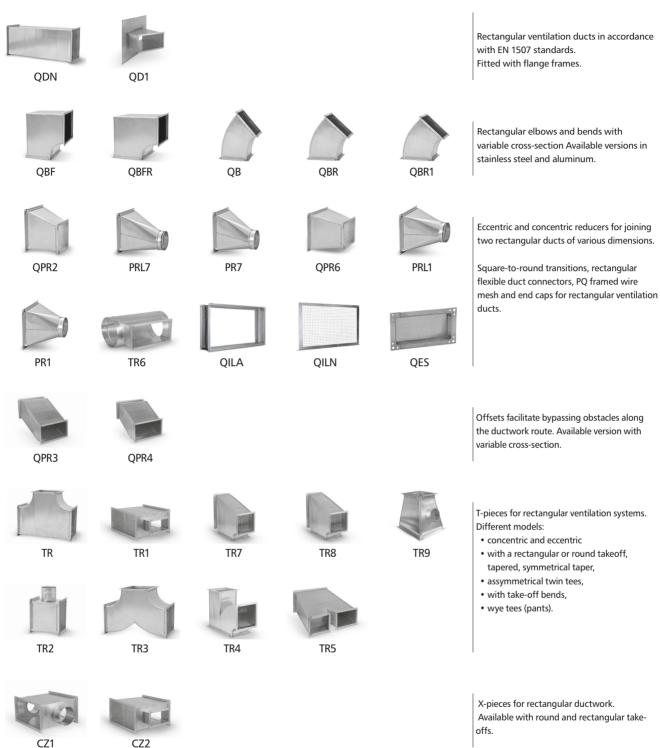






# **PRODUCTS**

### **RECTANGULAR VENTILATION DUCTS AND FITTINGS**



# **PRODUCTS**

#### PREINSULATED DUCTS AND FITTINGS IZOL® SYSTEM



SPRI



SPRPI

Round preinsulated ducts. Insulation thickness 25/50/100 mm. Different material configurations.



BSLI-90



BSLI-60







BSLI-15

A wide range of preinsulated bends. Insulation thickness: 16-100 mm. Inner bend is equipped with an EPDM rubber seal.



**RSCLLI** 



**TPCLI** 



MSFI

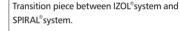


Preinsulated reducers, T-pieces and couplings for IZOL® system.

















End caps for terminating preinsulated ducts. Different insulation thicknesses: from 25 to 100 mm.







Preinsulated shut-off dampers. The damper blade position can be locked in position with screws.

### **DUCT AND FITTINGS INSULATED WITH RUBBER FOAM FOAM-SYSTEM**



F..-SPR-C



F..-SPRP-C



F..-BPL-90



F..-BPL-45



F..-BPKF-90



F..-BPKF-45

The rubber foam insulated ducts are available in 1- and 2-metre sections

Pressed bends insulated with rubber foam. Available with 90° and 45° angles, in the short version or in the female end version.

# **PRODUCTS**



F..-BSL-90





F..-BSLF-90



F..-BSLF-45

Segmented bends insulated with rubber foam. The bends are available also in the short version or in the female end version.



F..-RPCL



F..-RSCL



F..-RSCLF



F..-TPCL

Reducers and T-pieces insulated with rubber foam. Insulation thickness: 9, 13, 19, 25 mm.



F..-NSL



F..-MSF



F..-CPF



F..-CPF

Couplings and end caps for ventilation ducts and fittings. They are available in female and male end versions.



F..-DASLI



F..-DATLI



F..-DAOSL

Shut-off, airtight and inside duct dampers insulated with rubber foam.

### **DUCTS AND FITTINGS MADE OF EXPANDED POLYPROPYLENE (EPP)**



**EPP-SRGL** 





EPP-BPF-90

EPP-BPF-45



**EPP-MSF** 

EPP ducts are manufactured in 500 or 1000 mm and diameters 125-180 mm. The duct is supplied with one female coupling in the set.

EPP bends are supplied with one female coupling. The standard wall thickness is 15mm. Available on request 43 mm thick.

EPP female coupling for connecting ducts and fittings. This type of connection eliminates thermal bridges.

# RODUCTS

### PREINSULATED DUCTS AND FITTINGS - IZOL®SAFE-SYSTEM





SPRI

SPRPI

Ventilation ducts for air insulated Izol®Safe System.



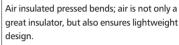




BPLIL-90

BPLIL-45











BSLIL-60



BSLIL-45



BSLIL-30



BSLIL-15

Air insulated bends. Double wall insulated bends consist of inner and outer bend, equipped with an EPDM rubber seal.



**RSCLIL** 



RSCLFLIL



**TPCLIL** 



**NSLIL** 



MSFIL

Reducers, T-pieces and couplings insulated with air. The fittings are available in female, male and female-male end versions.



**CPFIL** 

DASLIL







DATLIL



End caps for ducts and fittings of preinsulated IZOL®safe-system.

Air-insulated dampers with the possibility of locking the damper blade position. In-duct damper.

# **PRODUCTS**

### **CHEMICALLY RESISTANT PLASTIC DUCTS AND FITTINGS**



PVC-SRGL



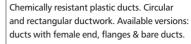
**PVC-QDNF** 



**PVC-QDNT** 



PVC-QDN





PVC-BPF-90



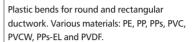
PVC-BPF-45



**PVC-QBFF** 



PP-QBFF





PVC-RPC



PVC-RPC



PVC-QPR6F



PVC-QPR2F



PVC-PR7F

Plastic reducers. Concentric and eccentric reducers. Square-to-round transition is also available.



PVC-TPCF-90



PVC-TPVF-45



**PVC-YSVF** 



**PVC-TRF** 



PVC-TR

Plastic ventilation T-pieces: 90° and 45°. The fittings are available with female ends or with flanges.



**PVC-MSF** 



PVC-CPF



PVC-FLS



PVC-FLSF



**PVC-FLSF** 

Plastic couplings and end caps for ventilation ducts. Flange gaskets to join fittings with flange ends.



PVC-ASVF-30



**PVC-WDF** 



**PVC-TAGF** 





Plastic roof cowls, base and angle take-offs. Angle take-off with mesh 30°.



**PVC-DATF** 



PVC-DSQF-V



PVC-DSQF-H



PP-DATFM



PP-DSQW

Regulating dampers for circular and rectangular ductwork. Regulating air damper for the actuator installation.



PP-NKSD-R



PP-SHR



PP-SHR-RM



PP-SHR-RMO

Plastic circular air diffuser, grilles and mounting frames.



Sound attenuator made of plastics.

# **PRODUCTS**

### **TRANS-OUICK SYSTEM**







Connecting clamp (pull rings) with bolt and pin for the clamp-together system. Available clamps with airtightness class D.





But-welded pipes for dust extraction system. TRANS-Quick system is made of galvanized steel, 0.7 & 0.9 mm thickness.







TELQT

Telescopic pipe is used to provide variable length adjustments (500-950mm) in ductwork w/o additional cutting or welding.





BSQT-60



BSQT-45



BSOT-30



BSQT-15

Segmented bends are made of galvanized steel, 0.7 & 0.9 mm thickness. Other bends degree 5-85° available on request









Segmented bends with smooth radius r=1.5d or r=2.0d. Other bends degree 5-85° available on request







BSD2QT-90



**RSCLOT** 



**RSLOT** 







TPRQT





TRVQT-45



YSVQT-45

Concentric or eccentric reducer for TRANS-Ouick system. Diffusor / confusor increases or decreases the pressure in ventilation system.



reducing 45 degree (lateral), Y-pieces. The main advantage of this system is quick assembly.

A wide range of T-pieces: equal, reducing,



ILSQT



**NSLQT** 



**MSLFQT** 



**ILAFQT** 

Connectors and adapters to join TRANS-Quick System with other ducting systems.



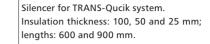
**CSHQT** 

The end cap with a handle is used to terminate a ductwork branch in the clamptogether system.

# **PRODUCTS**



SILQT-GL





**MPRQT** 



**PUQT-AS** 



PUQT



**IPRQT-DUCT-H** 



DASQT



DATQT



DAOSQT



**GKQT** 



**GKMQT** 

Reducing manifold is used for branching out extraction ducting, commonly by using PUQT flexible hoses.

The access door is pre-installed on the TRANS-Quick pipe. Equipped with hinges, draw latches and EPDM seals.

Regulating, airtight and backdraft dampers for dust extraction systems. The backdraft damper is available in reinforced version.

Sliding dampers for the clamp-together system. Equipped with manually operated damper plate or with a pneumatic actuator.

# **PRODUCTS**

#### **SMOKE EXTRACTION DUCTS AND FITTINGS - SMOKE SYSTEM**



SPR-Z-SMO

Spiral duct, fire resistance class: E<sub>600</sub> 120 (h<sub>o</sub>) S1500 single, for singlecompartment smoke extraction applications.



BSL-SMO-90



BSL-SMO-45



BSDL-SMO-90

Segmented bend for smoke extraction systems, r=d or long bend r=1.5d. Available also other angles.

Segmented male reducers for singlecompartment smoke extraction systems and combined (dual-function) systems.







NSL-SMO

MSF-SMO

Couplings for SMOKE system.



ILSL-SMO

Branches for smoke extraction system. Welding points and other joints must be covered with high-temperature sealant.



CSL-SMO



CSF-SMO



CSFH-SMO



ILSNL-SMO



ILSNF-SMO



ASVL-45-SMO



SSCL-SMO



SSL-SMO



SPSL-SMO



TSCL-SMO



TSL-SMO



TPCL-SMO



YSVL-SMO

Segmented end caps for smoke extraction systems: male, female or with a handle.

Take-offs are end pieces for SMOKE System. Mesh protects dirt from entering inside the ductwork.

Collar saddles for SMOKE System is used as a multi-purpose piece for construction of T-pieces or branches for SPR-Z-SMO duct.

Segmented, pressed T-pieces and Y-pieces for smoke extraction systems.

# **PRODUCTS**





ILA-NSL-SMO-SIL

ILA-K-SMO-SIL



SIL-GL-SMO



SGR-SMO

Flexible duct connectors are used for ducts longer than 5 m.

SIL-GL-SMO circular silencer designed for single-compartment smoke extraction and combined (dual-function) systems.

Exhaust grilles for installation directly on circular duct SMOKE System.









#### **B2B PLATFORM**

Log in to B2B Platform and enjoy new possibilities:

- Decide the way of service, save money or pay and demand,
- Monitor the status of your orders, save the time of your employees,
- Have on-line insight into your accounts,
- Be sure of continuity of deliveries and improve your cash flow.
- · Check your stock levels,
- Ask on-line questions,
- Download our catalouges, price lists and certificates.

#### **UNLIMITED DESIGN FLEXIBILITY:**

Our product libraries are available in the following programs:

- Revit BIM libraries.
- MagiCAD add-on to the AutoDesk 2D and 3D models.
- · VentPack add-on to the FluidDesk 3D models.
- Wentyle the basic version of the design software is available for free. Designing only 2D models.

The softwares are used for drawing and calculating ductwork with a circular or rectangular cross-section. They enable an efficient ductwork planning and easy implementation of changes to projects. The software generate an automatic list of components used in the project. The libraries are frequently updated with new products: heat recovery unit, fans and fire dampers.

### **QUOTATION SUPPORT WITH AlnorCAM:**

Have confidence and flexibility in Your actions:

- Minimize mistakes when processing documentation
- Speed up order processing time while maintaining a competitive prices and quality.
- · Make orders that suit Your needs.
- You can benefit more by both calculating in AlnorCAM and making an order via B2B platform.
- Software is FREE.

### **SOUND ATTENUATOR SELECTION SOFTWARE:**

See for Yourself how easy it is:

- Select silencers for the fan and the expected sound level.
- Compare acoustic parameters of chosen silencers.
- Export technical parameters to the specification, prepare complete specification.
- Select the best silencer model matching the expected acoustics.
- Make automatic quotations Premium version for wholesalers and distributors.
- Software is FREE.

## **Alnor Ventilation Systems Ltd.**

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