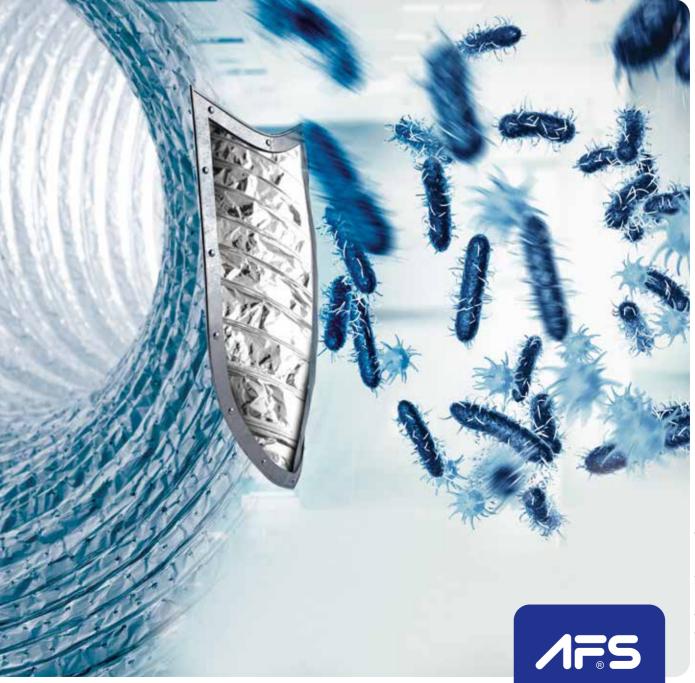




# **Antimicrobial Flexible Air Ducts**



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### **ANTIMICROBIAL NANO TECHNOLOGY**

Antimicrobial nano-sized silver particles are encapsulated in a polymer capsule.

Nano-sized polymer capsules;

- · Safe and healthy antimicrobial agent,
- Strongly antibacterial,
- Strongly antifungal,
- Totally ecological, non-toxic, no odor and harmful effects on environment,
- There is no release of silver ions on the surface, long-lasting antimicrobial performance...



### **CATALYTIC MECHANISM**

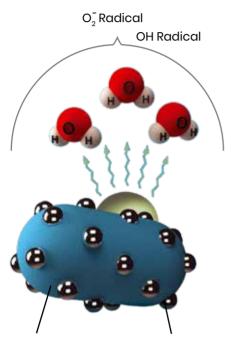
Silver atoms radiate energy in narrow wavelengths which leads to formation of O<sub>2</sub> and OH radicals that terminates the pathogens. As there is no specific killing mechanism for pathogens in this catalytic mechanism, microorganisms can't develop immunity against the antimicrobial capsules.



The dimensions tolerances, and mechanical resistance of all flexible ducts are tested, classified and certified according to EN 13180. All technical details are for information only. All information and technical data in this leaflet is subject to change without prior notice. Based on these, permissible length tolerance is (-)3% for stated length (measured after fully streched according to EN 1380)







#### Polymer Capsule

Silver Particles

### **ANTIMICROBIAL FLEXIBLE AIR DUCTS**

The existence of microorganisms, such as mold and bacteria has been well documented in ventilation systems. Humid and dark ambient of ventilation systems represent suitable environment for microbial growth.

The exposure through breathing of indoor air can lead to respiratory problems, infectious disease or other allergic reactions and various human healthy effects.

AFS has come up with a new hygienic solution, developed with State-Of-The-Art technology. It will be major component of safe ventilation system that protects your indoor air quality.

### **ANTIMICROBIAL CAPACITY**

Silver has long history as a natural antimicrobial agent in human health care. Based on many scientific experiments, silver particles are effective for over 600 microorganism species. However, all nano-silver technologies don't have the same antimicrobial effectiveness.

AFS HYGIENE Flexible Air Ducts are produced with the latests antimicrobial Silver technology in order to obtain maximum anti-microbial capacity, healthy and ecological solution.

Microorganisms	Legionella Pneumophila	E. Coli	P. Aeruginosa	S. Aureus	Aspergillus Niger	Paecilomyces Variotti	Chaetomium Globosum	Gliocladium Virens	Aureobasidium Pullulans
Туре	Gram (-)	Gram (-)	Gram (-)	Gram (+)	Mold	Mold	Mold	Mold	Mold
	bacteria	bacteria	bacteria	bacteria	(fungus)	(fungus)	(fungus)	(fungus)	(fungus)
Test	ISO 22196	ISO 22196	ISO 22196	ISO 22196	ASTM G21	ASTM G21	ASTM G21	ASTM G21	ASTM G21
Anti-microbial Performance	> 99,99 Bacteria Reduction 0 Mold Growth								
Certified by	IMSL (UK), Eurofins Lab (Italy), Fiti Testing & Research Institute (Korea)								



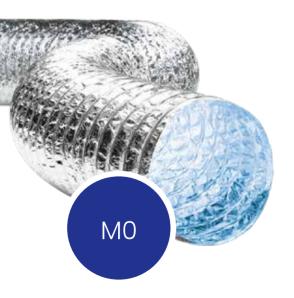
Hydrene

#### clean air through nano-technology



## **ALUAFS HYGIENE**

- **Duct Construction**
- Nominal Thickness Diameter Range (Ø) Wire Spacing Operating Temperature Range Air Velocity Operating Pressure Standard Length Packing Certificates (antimicrobial)
- : 3 ply aluminium 2 ply polyester Hygiene coating
- : 70 micron + Hygiene coating
- : 82 800 mm
- : 35 mm (ø ≥ 127 mm)
- : -30 °C / +150 °C
- : 30 m/s (max)
- : +3000 Pa (max)
- : 10 m
- : Special design cardboard box
- : IMSL (UK)
  - Eurofins Biolab (Italy) Fiti Testing & Research Institute (Korea)



# **ALUAFS.F HYGIENE**

Duct Construction

- Nominal Thickness Diameter Range (Ø) Wire Spacing Operating Temperature Range Air Velocity Operating Pressure Standard Length Packing Certificates
- : 3 ply aluminium 1 ply polyester Hygiene coating
- : 81 micron + Hygiene coating
- : 82 800 mm
- : 35 mm (ø ≥ 127 mm)
- : -30 °C / +150 °C
- : 30 m/s (max)
- : +3000 Pa (max)
- : 10 m
- Special design cardboard box
- : M0 (France) IMSL (UK) Eurofins Biolab (Italy) Fiti Testing & Research Institute (Korea)





### **ISOAFS-ALU HYGIENE.W**

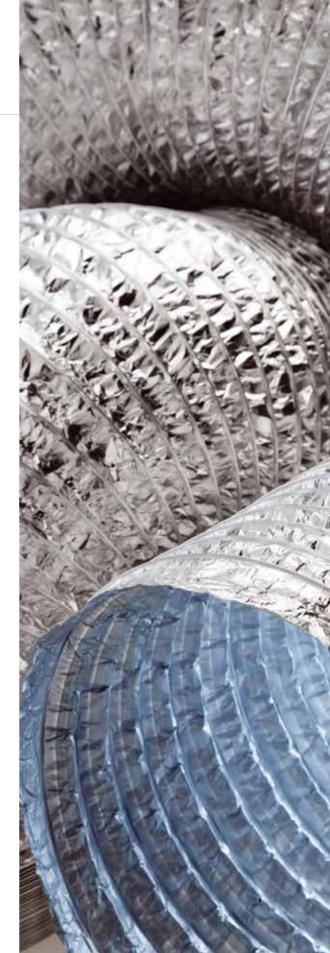
Inner Duct Construction

Nominal Thickness of Inner Duct Jacket Construction

- Nominal Thickness of Jacket Insulation - Thickness - Unit Weight Diameter Range (Ø) Wire Spacing Operating Temperature Range Air Velocity Operating Pressure Standard Length
- Packing

Certificates (antimicrobial)

- : 3 ply aluminium 2 ply polyester Hygiene coating
- : 70 micron + Hygiene coating
- : 1 ply aluminium
- 2 ply polyester
- 45 micron
- : Polyester fiber 25 mm 225 g/m<sup>2</sup>
- : 82 800 mm
- : 35 mm (ø ≥ 127 mm)
- : -30 °C / +120 °C
- : 30 m/s (max)
- : +3000 Pa (max)
- : 10 m : Specia
- Special design cardboard boxEurofins Biolab (Italy)
- Fiti Testing & Research Institute (Korea) IMSL (UK)





clean air through nano-technology



# **ISOAFS-ALU.F HYGIENE ECOSOFT**

Inner Duct Construction

Nominal Thickness of Inner Duct Jacket Construction

Nominal Thickness of Jacket Insulation - Thickness - Density Diameter Range (Ø) Wire Spacing Operating Temperature Range

- Air Velocity Operating Pressure
- Standard Length
- Packing
- Certificates

- : 3 ply aluminium 1 ply polyester Hygiene coating
- 81 micron + Hygiene coating
- : 1 ply aluminium
- 2 ply polyester 45 micron
- Glass wool 25 mm 16 kg/m<sup>3</sup>
- : 82 800 mm
- : 35 mm (ø ≥ 127 mm)
- : -30 °C / +150 °C
- : 30 m/s (max)
- : +3000 Pa (max)
- : 10 m
- Special design cardboard box
- : M0+M1 (France) IMSL (UK) Eurofins Biolab (Italy) Fiti Testing & Research Institute (Korea)



look up 🔨 notice the fresh air



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# **Antimicrobial Flexible Air Ducts**





FLEXIBLE KANAL AŞ

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