

# Hygiene

## Antimicrobial Flexible Air Ducts



antimicrobial series

**AFS**<sup>®</sup>

[cfs.com.tr](http://cfs.com.tr)



### 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  $O_2$  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.



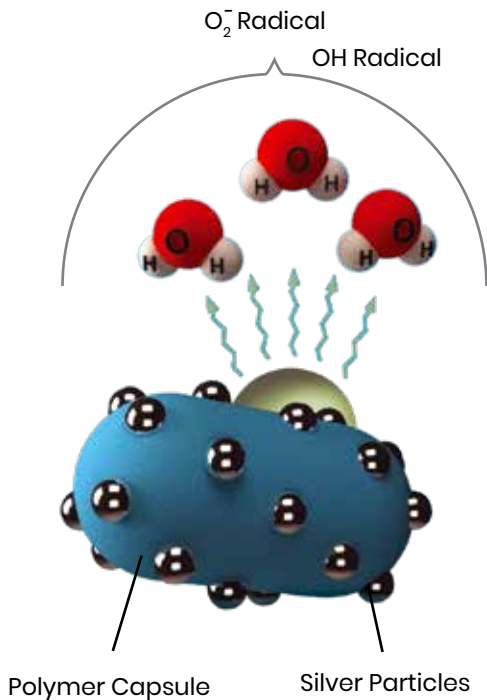
The dimensions, tolerances, and mechanical resistance of all flexible ducts are tested, classified and certified according to EN 13180. All technical details are for information only. All information and technical data in this leaflet is subject to change without prior notice. Based on these, permissible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

## 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.

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



## ALUAFS HYGIENE

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



## ALUAFS.F HYGIENE

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

M0



## ISOAFS-ALU HYGIENE.W

Inner Duct Construction	: 3 ply aluminium 2 ply polyester Hygiene coating
Nominal Thickness of Inner Duct	: 70 micron + Hygiene coating
Jacket Construction	: 1 ply aluminium 2 ply polyester
Nominal Thickness of Jacket	: 45 micron
Insulation - Thickness - Unit Weight	: Polyester fiber - 25 mm - 225 g/m <sup>2</sup>
Diameter Range (Ø)	: 82 - 800 mm
Wire Spacing	: 35 mm (Ø ≥ 127 mm)
Operating Temperature Range	: -30 °C / +120 °C
Air Velocity	: 30 m/s (max)
Operating Pressure	: +3000 Pa (max)
Standard Length	: 10 m
Packing	: Special design cardboard box
Certificates (antimicrobial)	: Eurofins Biolab (Italy) Fiti Testing & Research Institute (Korea) IMSL (UK)

clean air through nano-technology



## ISOAFS-ALU.F HYGIENE ECOSOFT

Inner Duct Construction	: 3 ply aluminium 1 ply polyester Hygiene coating
Nominal Thickness of Inner Duct	: 81 micron + Hygiene coating
Jacket Construction	: 1 ply aluminium 2 ply polyester
Nominal Thickness of Jacket	: 45 micron
Insulation - Thickness - Density	: Glass wool - 25 mm - 16 kg/m <sup>3</sup>
Diameter Range (Ø)	: 82 - 800 mm
Wire Spacing	: 35 mm (Ø ≥ 127 mm)
Operating Temperature Range	: -30 °C / +150 °C
Air Velocity	: 30 m/s (max)
Operating Pressure	: +3000 Pa (max)
Standard Length	: 10 m
Packing	: Special design cardboard box
Certificates	: MO+M1 (France) IMSL (UK) Eurofins Biolab (Italy) Fiti Testing & Research Institute (Korea)

**look up** ^  
notice  
the fresh air



# Hygiene

## Antimicrobial Flexible Air Ducts



**AFS**<sup>®</sup>

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