

AFS[®] Hygiene AntiMicrobial



ANTI-MICROBIAL 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.

ANTI-MICROBIAL NANO TECHNOLOGY

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

Nano-sized polymer capsules;

- Safe and healthy anti-microbial agent,
- Strongly anti-bacterial,
- Strongly anti-fungal,
- Totally ecological, non-toxic, no odor and harmful effects on environment,
- There is no release of silver ions on the surface, long-lasting anti-microbial 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 anti-microbial capsules.





TECHNICAL PROPERTIES

Inner duct	Aluminium (Anti-microbially Treated)
Jacket	Aluminium
Available diameters	Ø 102 mm - Ø 800 mm
Temperature range	-30°C / +150 °C
Air Velocity	30 m/s (max)
Operating pressure	3000 Pa (max)
Insulation	glasswool --- white polyester
Density of insulation	16 kg/m ³ --- 250 g/m ²
Thickness of insulation	25 mm
Standart length	10 m
Packing	Individual carton box



ANTI-MICROBIAL CAPACITY

Silver has long history as a natural anti-microbial 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 anti-microbial effectiveness.

AFS HYGIENE Flexible Air Ducts are produced with the latests Anti-Microbial 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 Varioth	Chaetomium Globosum	Gliocladium Virens	Aureobasidium Pullulans
Type	Gram (-) bacteria	Gram (-) bacteria	Gram (-) bacteria	Gram (+) bacteria	Mold (fungus)	Mold (fungus)	Mold (fungus)	Mold (fungus)	Mold (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 Reduction -- 0 Growth

Certified by

IMSL (UK), Eurofins Lab (Italy), Fiti Testing & Research Institute (Korea)



"Motivation for ventilation"



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