

Aluminium Pre-insulated HVAC Ducts

### **Technical Data Sheet**



## **ALP SYSTEM**

Aluminium Pre-insulated ducts, self-supporting, for Heating, Ventilation and Air Conditioning distribution systems.

## **Advantages**

- Long duration granted by the characteristics of the aluminium foil (absolutely no rust or other type of deteriorations)
- No fibers release or dispersion
- Very high thermal insulation
- Outdoor installation without any additional protection
- Excellent air tightness
- Resistant to high pressure of the air (positive and negative)
- Resistant to salty atmosphere
- Easy access for maintenance
- Easy cleaning (water washing, brushing or disinfection)

### **Fabrication**

ALP SYSTEM air ducts are fabricated using rigid polyisocyanurate foam boards, faced on both side by an aluminium foil.

- Panel thickness: 21 mm, 30 mm and 50 mm
- Rigid polyurethane foam, closed cells, density 48 kg/m³, without CFC-HCFC-HFC
- Internal facing:

   Aluminium foil, 80 or 500 micron thickness, treated with 3 g/m² of transparent varnish,
- External facing:
   Aluminium foil, 80, 200 or 500 micron thickness, treated with 3 g/m² of transparent varnish as protection against weather agents and UV rays,

### **Application**

Realisation of HVAC air distribution systems (Supply, Return, Exhaust, Fresh air) to be installed Indoor and Outdoor, especially in the following projects:

- Hospitals and Operating Suites,
- Clean Rooms and Pharmaceutical Industry,
- Food Industry,
- Swimming Pools.

### Range

Ref.	Typical Application	Panel Thickness	Alumini Thick EXT	
ALP100RF	Indoor	21 mm	80 μm	80 μm
ALP200RF	Machine Rooms	21 mm	200 μm	80 μm
ALP230RF	Outdoor	30 mm	200 μm	80 μm
ALP500/500	Heavy Duty	50 mm	0,5 mm	0,5 mm



## Specifications of Use

Temperature (°C)	Air Velocity (m/sec)	Pressure (Pascal)
+110 / -35	30	2000*

(\*) Higher Pressures are possible - Please contact ALP.

## **Fire Safety**

- Class 0 - British Standard 476, Part 6 & 7

#### **Technical Characteristics**

■ Panels Stiffness : **R** 5 (**El**<sub>u</sub> >350.000 N·mm)

Thermal Conductivity:

(new panel)  $\lambda$  0,0213 W/(m·K) (aged panel)  $\lambda$  0,0226 W/(m·K)

■ Thermal Resistance: R m<sup>2</sup>·K/W

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21 mm		30 mm	50 mm			
	0,986	1,408	2,347			

■ Water Vapour Transmission:

 $\mathbf{Z} \geq 2000 \text{ (m}^2 \cdot \text{h} \cdot \text{Pa)/mg}$ 

 Nominal Pressure\*: Positive: 2.000 Pascal Negative: -2.000 Pascal

(\*) Higher Pressures are possible – Please contact ALP.

## **Duct Sealing Class**

Pressure (Pascal)	Class
- 750	С
400	С
1000	В
2000	В

Performances reached with a "standard" fabrication. Better Sealing Class can be reached – Please contact ALP.



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**Photo Gallery** 

## Outdoor



## **Machine Rooms**



## **Indoor**



## **Coloured**









