



## Preinsulated Duct System

**Isocanale** is a 100% free CFC and HCFC high performance insulation polyisocyanurate PIR board covered on both sides with an aluminum foil.

**Since early 70's, it has been specifically developed to make better ductworks.**

### isocanale extreme

For applications in aggressive environments (swimming pools, salt water areas)



### isocanale clean

Suggested in applications of very clean environments (hospitals, laboratories, clean rooms)



### isocanale indoor

For internal use in residential, commercial and industrial buildings



### isocanale outdoor

For external use in residential, commercial and industrial buildings





## Advantages of the ISOCANALE system

### Quality of the air and efficiency of the system

The internal surface of the duct is entirely constructed of aluminium, which guarantees clean air flow. The limited flanges used to join individual duct sections together, provides a pneumatic hold that further improves the efficiency of the system.



Product of company certified according to  
 Quality Management System UNI EN ISO 9001:2015  
 Environmental Management System UNI EN ISO 14001:2015  
 Occupational Health and Safety Management UNI EN ISO 45001:2018

### Energy savings and thermal insulation

Stiferite's Polyurethane foam has a very low thermal conductivity coefficient of  $\lambda_1 = 0,021$  W/mK and guarantees near perfect thermal insulation even at reduced thicknesses like 20 and 30 mm. This characteristic significantly limits the energy consumption of the entire ventilation system. In addition, the aluminium facers present on both sides of the panel, assure excellent waterproofing and vapor blocking performance.

### Lightweight and safety

Pre-insulated ducts are nearly 15% of the weight of traditional sheet metal ducts. An important advantage in terms of economy, environment and safety. Lighter ducts require less anchoring points and are much safer in case of an eventual accident or earthquake. Another important advantage in terms of safety is the excellent end-use condition fire rating of Euroclass B s1 d0 (based on the type of panels).

### Low environmental impact



Environmental Product Declaration - EPD - and LCA studies are available.

### Minimum Noise

Stiferite's polyurethane foam panels dampen the transmission of vibration and have good sound (noise) absorption qualities.

### Durability

The use of polyurethane foam and aluminium, guarantee a long lasting system.

### Reduced Costs

Compared to traditional sheet metal ducts, the costs of a pre-insulated duct system is significantly less in fabrication, shipment and field installation.

### Versatility

The panels may be cut to size directly on-site. Simple and easy installation of complex air distribution routes and modifications based on current needs, may be made without any difficulty.

## Certifications of the ISOCANALE system

Certification type	Harmonised technical specification
Quality management system	ISO 9001/2015
Environmental management system	ISO 14001/2015
Occupational health and safety management system	OHSAS 18001/2007
Reaction to fire	UNI EN 13501-1:2009
Airtightness	UNI EN 13403:2004
Acoustics	UNI EN ISO 7235:2009
Acoustics	UNI EN ISO 354:2003
Resistance against pressure	UNI EN 13403:2004
Stiffness class	UNI EN 13403:2004
Thermal conductivity	EN 12667:2001 EN 12664:2001
Water vapour transmission	ASTM F 1249-06
Toxicity index	Defence standard 02-713 (NES713)
Arrêté du 20/2/2012 (French Legislation)	UNI EN ISO 16000-9:2006 + ISO 16000-6:2011
Environmental Product Declaration - EPD	ISO 14025, EN 15804

