# FabricAir<sup>®</sup> Dispersion Systems

Noiseless Ventilation

> A Lightweight Solution

> > Improved Indoor Air Quality

> > > No Condensation Problems

The Sky is the Limit with Fabric Duct from FabricAir

Draft Free Air Distribution

Lower Installation Cost

**Easy Maintenance** 

Many Colors to choose from

## Best Warranty in the Industry

#### A Flexible And Cost Effective Air Distribution

FabricAir® Dispersion Systems employ woven materials to deliver conditioned air to a wide variety of applications with varying individual requirements. FabricAir® Ducts can be installed using a number of different suspension systems which allow easy installation and rapid removal for washing and maintenance.

The systems are lightweight and extremely flexible and are specified for use in leisure, retail, media and broadcasting, manufacturing, education, commerce and food processing. Available in round and half-round profiles, these systems are easily suspended from ceilings, roof structures and walls to provide a flexible and cost-effective air distribution system. The fire retardant, woven material is antibacterial and mould-resistant. Available in a wide range of standard and custom colours, the material can also be customized with company logos and advertising messages.









### **Benefits for Architects, Consultants and Engineers**



FabricAir was the first company to produce and market fabric duct systems.

### CFD (Computational Fluid Dynam-

This is an exciting new way to provide our customers (Architects, Consultants, Engineers and End Users) with the opportunity to predict the air velocity and temperature distribution in any range of circumstances.

R & D FabricAir has a long tradition of research and development since the initial invention of the

FabFlow™

original FabricAir Concept in 1973. FabricAir continues to set the standards for the entire industry.

All solutions are developed in close cooperation with the End User's selected professionals to provide the best air distribution for the project, meeting or exceeding all specifications and standards that may apply to the particular application.

Lightweight A FabricAir duct system is much lighter than a comparable metal system. FabricAir offers state of the art, lightweight permeable and non-permeable fabrics.

MeshFlow<sup>™</sup> SonicFlow<sup>™</sup> PerfoFlow<sup>™</sup> NozzFlow<sup>™</sup> OriFlow<sup>™</sup>

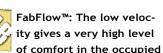
Flexibility With a FabricAir dispersion system there are no limitations when it comes to dimensions, colour, offsets, elbows, nozzles, slots and other important product features.

Draught-free One of the major advantages, and the initial reason for developing fabric based duct systems, is the absence of any draught. The system also meets any functional requirements for hygiene, aesthetics and ease of maintenance.

Easy Installation FabricAir duct systems are easily installed and can offer savings of up to 75% of the manpower needed to install other types of duct systems.

To ensure correct air distribution you can choose from 6 different flow technologies covering: High-, mediumor low throw.

### **Flow Technology**



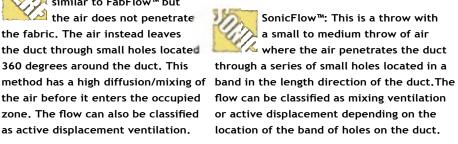
zone. The flow is driven by natural convection from local heat sources. This can be classified as active displacement ventilation.



PerfoFlow™: The flow is similar to FabFlow™ but l the air does not penetrate

the fabric. The air instead leaves the duct through small holes located 360 degrees around the duct. This the air before it enters the occupied zone. The flow can also be classified as active displacement ventilation.

MeshFlow™: MeshFlow™ is a flow with a small throw of air. The air 🚧 is either thrown away from the duct or has a mixing zone just beneath the duct before it drops down into the occupied zone. The flow can be classified as mixing or active displacement ventilation depending on the placement of the mesh on the duct.



Zipper Zipper open closed Fabric ducts connect onto sheet metal systems and are secured with a cinchdown duct belt.

OriFlow™: This is throwing air through large holes on the surface of the duct. Oriflow is classified as mixing ventilation. It is only for distribution of large air volumes.

NozzFlow™: This is a flow of a medium to long throw of air. The Ź air penetrates the duct through small nozzles, which increase

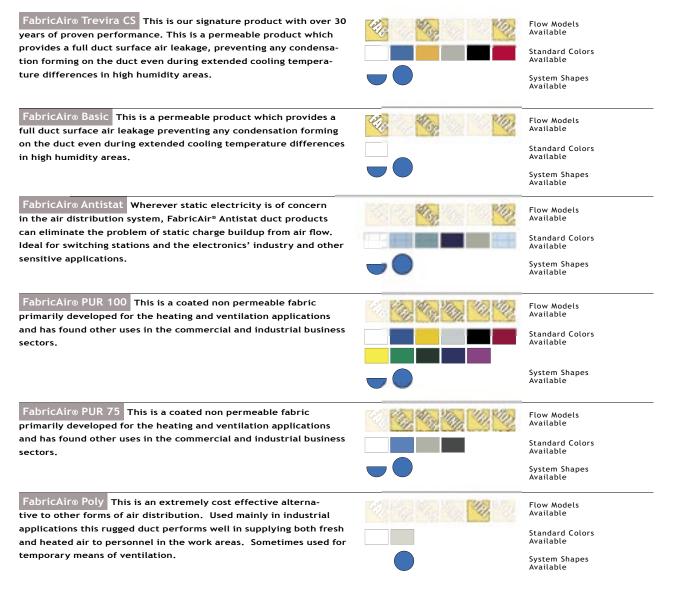
the velocity. Nozzflow™ can be classified as mixing ventilation with a very equal distribution of air. The air is being distributed with precision and flexibility by positioning the nozzles giving the air distribution a superior quality.



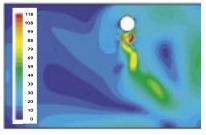


### Types of Fabrics Available to Most Applications





CFD 2D-graphic showing air velocity [fpm]. Showing one fabric duct in exhibition hall.



### **Engineered Air Distribution**

CFD (Computational Fluid Dynamics) is the way of providing our customers (Architects, Consultants, Engineers and End Users) with the opportunity to predict and graphically show the air and temperature for any given circumstance prior to doing the actual installation allowing for changes without the cost of the changes. This service is only available from FabricAir<sup>®</sup>.



CFD graphic showing temperature gradient [°F]. Showing one fabric duct in exhibition hall.



Find	suitable	<b>Fabrics</b>
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						Type of Throw:	Low	Medium	Medium	Medium	High	High		<b>STE</b> I Con	
STEP 5, EXTRA STEP Consider the suitability						Flowmodel:	FabFlow™	PerfoFlow <sup>™</sup>	<b>MeshFlow</b> <sup>™</sup>	SonicFlow	OriFlow	NozzFlow <sup>™</sup>		<b>STE</b> Sele	
of the Fabric in your Application.						Application:	Ľ.	- Color	Con and a second	No.	all.	10			
						Refrigeration	•		•					STE	
	20					Evaporative Cooling		٠			٠	•		Che	
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ger	orai	ond	ing	ilati	imi	Dehumidification		•	•	•		•			
Refrigeration	Evaporative	Air C	Heating	Ventilation	Dehumi	Fabric :							-		
						FabricAir® Trevira CS	•		•			•	Permeable		
						FabricAir <sup>®</sup> Basic	•		•			•	Permeable		
						FabricAir <sup>®</sup> Antistat			•			•	Non Permeable		
	•		•			FabricAir <sup>®</sup> PUR 100		•	•	•	•	•	Non Permeable		
						FabricAir <sup>®</sup> PUR 75		•	•	•	•	•	Non Permeable		
	•	•	•			FabricAir <sup>®</sup> Poly					•		Non Permeable		

#### **FIND SUITABLE FABRIC:**

**STEP 1** Consider type of throw.

STEP 2 Select a flow model

#### STEP 3

Check whether the flow model suits the application. Select another flow model f not.

#### **STEP 4**

Select an available Fabric for that flow model. Permeable or Non Permeable.

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#### FabricAir

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