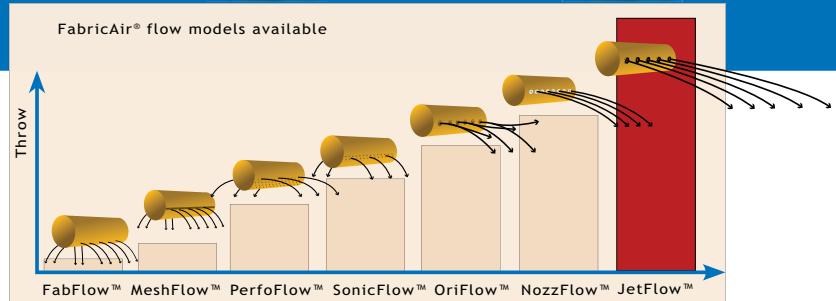
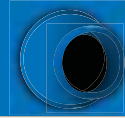
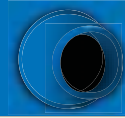
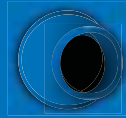
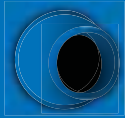


# FabricAir® JetFlow™



FabricAir®'s JetFlow™ with built-in Jet-diffusers provide exceptionally long throws for large areas.

## THE LONGEST THROW EVER FROM A FABRIC DUCT SYSTEM

### THE JETFLOW™ ADVANTAGES

- **LONGEST THROW EVER FROM A FABRIC DUCT**
- **PRECISE DIRECTIONAL AIR DISTRIBUTION**
- **APPLICABLE TO BOTH HEATING, COOLING AND VENTILATION**
- **IDENTICAL PERFORMANCE TO CONVENTIONAL SPOT DIFFUSERS BUT WITH MORE ADVANTAGES**
- **AVAILABLE IN VARYING DIAMETERS WHICH ALLOWS FOR GREATER FLEXIBILITY IN DESIGN**
- **EASY TO INSTALL AND NO BALANCING IS NECESSARY**
- **COMPETITIVELY PRICED WHEN COMPARED TO CONVENTIONAL DIFFUSERS**

JetFlow™ is capable of generating exceptional throws through the use of Jet-diffusers in varying diameters. This is particularly useful in warehouses, factories and industrial applications. JetFlow™ is competitively priced when compared with conventional diffusers offering accurate and reliable performance.

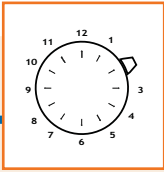


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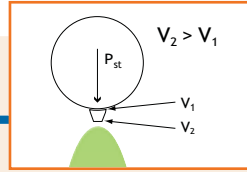
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**FabricAir**



**Fig. 1. Flexible position**

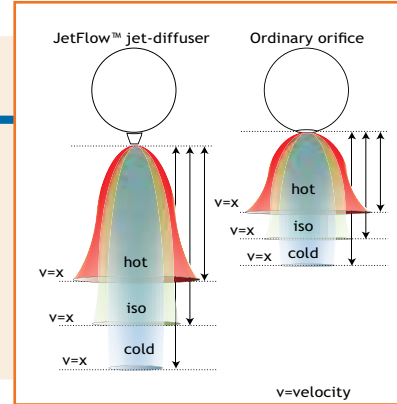
Rows of Jet-diffusers are placed at the desired position (indicated using a dial) around the circumference. FabricAir engineers help design the optimum position for each application.



**Fig. 2. JetFlow™ accelerates air**

JetFlow™ increases the throw length by accelerating the flow of air through the reduced diameter of the opening formed by the Jet-diffuser.

V=velocity  
P<sub>st</sub>=static pressure



**Fig. 3. Comparison of JetFlow™ and ordinary orifices**

Air outlet from duct via JetFlow™ and ordinary orifice. Each shown in three conditions: hot, isothermal or cold.

# Characteristics

## Performance

- Long throw  
By accelerating the outlet air, FabricAir® JetFlow™ provides a longer throw not usually achieved using a conventional orifice. This allows for longer throws not previously available in fabric duct systems (fig. 3).
- Large air volumes  
JetFlow™ supply air volumes ranging from 73-2874 m<sup>3</sup>/h [43-1691 cfm] (fig. 9).
- Predictable air zones  
Jet-diffusers supply a stable air volume calculated by FabricAir engineers to optimize every part of the room.
- Hot air  
Even in heating applications JetFlow™ can generate very long throws (fig. 5).

- Quiet  
NC level from 20 to 35 (fig. 9).
- Accuracy  
JetFlow™ accelerates and accurately throws the air perpendicular to the duct creating longer throws than conventional orifices (fig. 7).

## System design

- Supply Air  
JetFlow™ distributes cold, hot and ambient air.
- Custom Design  
JetFlow™ is customized by FabricAir® engineers for each project with individualized dimensions, location and number of Jet-diffusers (fig. 4).
- Flexible position  
Rows of Jet-diffusers can be placed anywhere on the circumference of the duct (fig. 1).

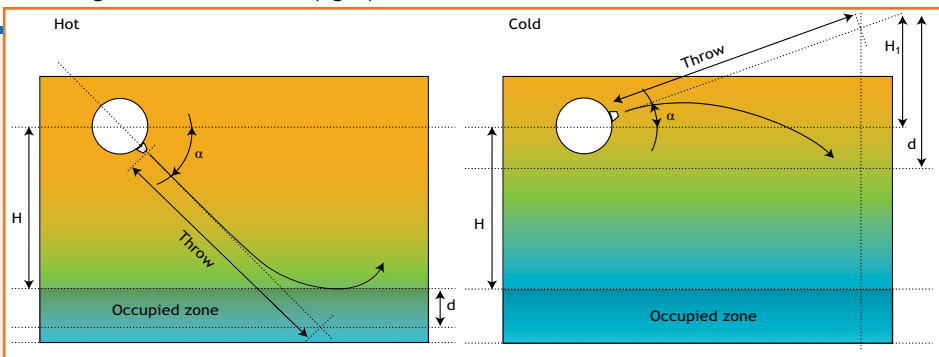
## Installation

- Connect with zippers  
The Jet-diffusers are easily mounted using zippers (fig. 8).
- No balancing required  
Both the Jet-diffusers and the duct system are self-balancing and need no extra balancing unlike a conventional diffuser or some competing fabric ducts. Once it is operational, the duct system and the Jet-diffusers are ready to go.

*Continued...*

**Fig. 4. Throw length**

FabricAir engineers will assist in designing the size of the FabricAir Jet-diffusers, air flow, throw, outlet velocity, angle and the deflection (fig. 6).

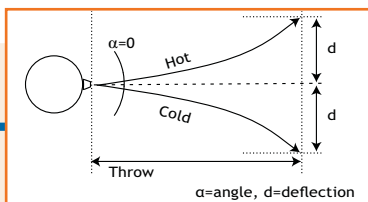


**Fig. 5. Maximum throw, heating**

FabricAir® engineers will assist in calculating the flow, size, throw (isothermal, cooling or heating), pressure drops and sound levels, as well as system characteristics.

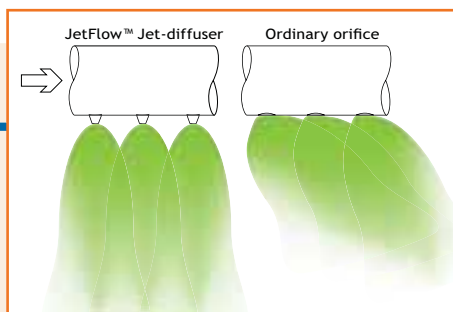
Maximum throw sample data for heating at 150 Pa [0.6 inWG]

Size of Jet-diffuser	Δt 0°C (ISO) [0°F]		Δt 10°C [18°F]		Δt 25°C [45°F]	
	m	ft	m	ft	m	ft
2	18	57	10	29	6	20
4	35	115	30	98	19	62
8	71	234	65	213	41	134



**Fig. 6. What is deflection?**

Positive deflection (hot) is a result of hot air. Negative deflection (cold) is a result of cold air.



**Fig. 7. Comparison of JetFlow™ and ordinary orifices**

Supply air from conventional orifices is pulled along the length of the duct reducing throw. This is not the case using JetFlow™ where supply air is perpendicular to the duct creating longer throws.

**Features**

- Colors  
The JetFlow™ Jet-diffusers and the duct are made out of the very same fabric. Colors therefore match (alternative colors are optional).
- No condensation  
Condensation will not form on Jet-diffusers.

- Laundering  
JetFlow™ Jet-diffusers are easily unzipped before laundering.
- Zip-in JetCap (air barrier)  
Shut off an individual Jet-diffuser if required (optional) just by inserting a Zip-in JetCap (fig. 8).

**Application examples**

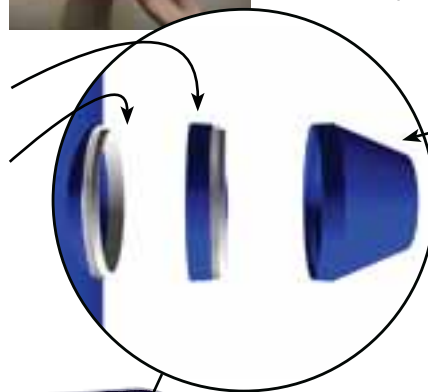
- Airport terminals
- Manufacturing facilities
- Warehouses
- Sports facilities
- Distribution centers
- Heavy-duty industrial applications

**A ZIP-IN JETCAP MAKES IT POSSIBLE TO SHUT OFF THE JET-DIFFUSER.**



A Zip-in JetCap allows the Jet-diffusers to be shut off individually (optional).

Insert Zip-in JetCap (optional) to shut off.  
Zipper for a Zip-in JetCap or Jet-diffuser.

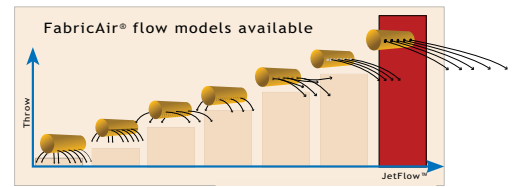


JetFlow™ Jet-diffusers are reinforced for high air velocity. Designed to always be stretched out. Sealed seams without the loss of any fibers.

**Fig. 8. In designing the system, JetFlow™ Jet-diffusers can be placed anywhere on the duct circumference so that conditioned air can easily be directed to where it is needed.**

Fabric color for the duct and the JetFlow™ Jet-diffuser match.





Flow model characteristics:	
Flow principle:	Mixing or spot
Supply air:	Isothermal, cold and hot air
Exit velocity:	10-16 m/s [1900-3100 ft/m]
Throw type:	High

# JetFlow™

JetFlow™ is a Jet-diffuser suitable for supplying air to large areas where long throws and large volumes of air are required. JetFlow™ can be used for isothermal, heating and cooling applications. A JetFlow™ Jet-diffuser accelerates the air velocity providing a longer throw. The number of Jet-diffusers and the diameter and position on the duct are factory engineered.

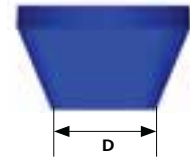


Fig. 10a and 10b. Example of throw lengths from a JetFlow™ Jet-diffuser at three velocities.

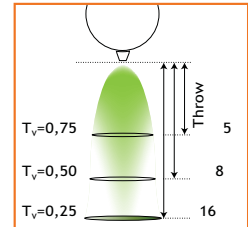


Fig. 10a. Isothermal air supply.  $T_v$  in m/s. Throw in m.  $P_s=120$ . Size 2.

Fig 10b. Isothermal air supply.  $T_v$  in ft/m. Throw in ft.  $P_s=0.48$ . Size 2.

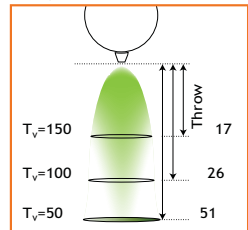


Fig. 9.

		TECHNICAL DATA METRIC												
Size	D [mm]		Static pressure [Pa]			Exit velocity (approx.) [m/s]			Terminal velocity [m/s]					
			60	10	90	12	120	14	150	16	0,25	0,50	0,75	
2	51	Throw [m]	11	6	4	14	7	5	16	8	5	18	9	6
		Air volume [m³/h]	73			89			103			115		
		NC Level	<20			21			23			24		
3	75	Throw [m]	17	8	6	20	10	7	24	12	8	26	13	9
		Air volume [m³/h]	164			200			231			259		
		NC Level	20			21			25			27		
4	102	Throw [m]	22	11	8	27	14	9	31	16	11	35	18	12
		Air volume [m³/h]	291			256			411			460		
		NC Level	22			27			30			33		
5	127	Throw [m]	28	14	10	34	17	12	39	20	13	44	22	15
		Air volume [m³/h]	454			557			643			718		
		NC Level	22			28			31			33		
6	152	Throw [m]	34	17	12	41	21	14	47	24	16	53	27	18
		Air volume [m³/h]	654			801			915			1035		
		NC Level	23			29			32			34		
8	203	Throw [m]	46	23	16	55	28	19	64	33	22	71	36	25
		Air volume [m³/h]	1163			1425			1645			1839		
		NC Level	24			29			32			34		
10	254	Throw [m]	58	30	21	70	36	25	81	42	29	90	46	32
		Air volume [m³/h]	1818			2226			2570			2874		
		NC Level	25			31			33			35		

Data are based on single Jet-diffusers' isothermal air supply (fig. 10a).

		TECHNICAL DATA IMPERIAL												
Size	D [in]		Static pressure [InWg]			Exit velocity (approx.) [ft/m]			Terminal velocity [ft/m]					
			0.24	1900	0.36	2400	0.48	2700	0.60	3100	50	100	150	
2	2	Throw [ft]	36	18	12	45	22	15	51	26	17	57	29	19
		CFM	43			52			61			68		
		NC Level	<20			21			23			24		
3	3	Throw [ft]	55	27	18	67	34	22	77	39	26	86	43	29
		CFM	96			118			136			152		
		NC Level	20			21			25			27		
4	4	Throw [ft]	73	37	25	89	45	30	103	52	35	115	58	39
		CFM	171			210			242			271		
		NC Level	22			27			30			33		
5	5	Throw [ft]	92	46	31	112	57	38	129	65	44	145	73	49
		CFM	267			327			378			423		
		NC Level	22			28			31			33		
6	6	Throw [ft]	111	56	38	135	68	46	156	79	53	174	88	59
		CFM	385			472			545			609		
		NC Level	23			29			32			34		
8	8	Throw [ft]	149	77	52	182	93	63	210	107	72	234	119	81
		CFM	685			838			968			1082		
		NC Level	24			29			32			34		
10	10	Throw [ft]	190	99	69	231	119	82	265	137	94	295	152	104
		CFM	1070			1310			1513			1691		
		NC Level	25			31			33			35		

Data are based on single Jet-diffusers' isothermal air supply (fig. 10b).

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