

SELECTING FABRIC AND FLOW MODEL BASED ON NOISE LEVEL, STEPS 1-3

Acceptable Noise Level

An important parameter for achieving a healthy indoor climate is having a noise level that is not too high. Noise usually comes from outdoors or is generated by internal processes, machinery or a building's technical installations, including the HVAC system.

This table shows the Noise Criteria (NC-Level) depending on FabricAir® Flow Model, FabricAir® Fabric and Design Pressure.

- 15 = LowNoise™, ring
- 20 = LowNoise™, ring

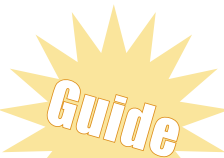
Fabric duct technology is “noiseless”. So you are free to choose from our fabrics and flow models for most applications. Another advantage, compared to other technologies such as sheet metal ducts, is that fabric dispersion systems do not convey sound along the duct. A little noise is still unavoidable, however, and more if

the pressure is increased. The noise levels measured are shown in the table below.

In special cases, even miniscule noise levels are undesirable. If you require a noise level below NC 20, please contact FabricAir® and ask for solutions optimised for LowNoise™.

NC level

	60	80	Design pressure, ΔP [Pa]				160	180	200		
			100	120	140	160	180	200	Fabric:	Flow Model:	
	15	15	15	20	20	25	25	25	FabricAir® Trevira CS	FabFlow™	
	15	15	15	20	20	25	25	25	FabricAir® Basic		
	25	30	30	30	35	35	40	40	FabricAir® PUR 100	PerfoFlow™	
	25	30	30	30	35	35	40	40	FabricAir® PUR 75		
	20	25	25	30	30	35	35	40	FabricAir® Trevira CS	MeshFlow™	
	20	25	25	30	30	35	35	40	FabricAir® Basic		
	25	25	30	30	35	35	40	40	FabricAir® AntiStat		
	25	30	35	35	40	40	45	45	FabricAir® PUR 100		
	25	30	35	35	40	40	45	45	FabricAir® PUR 75		
	25	30	30	30	35	35	40	40	FabricAir® PUR 100	SonicFlow™	
	25	30	30	30	35	35	40	40	FabricAir® PUR 75		
	20	25	25	25	30	30	35	35	FabricAir® PUR 100	OriFlow™	
	20	25	25	25	30	30	35	35	FabricAir® PUR 75		
	20	25	25	30	30	35	35	35	FabricAir® Poly		
	20	20	25	25	30	30	35	35	FabricAir® Trevira CS	NozzFlow™	
	20	20	25	25	30	30	35	35	FabricAir® Basic		
	20	25	25	30	30	35	35	35	FabricAir® AntiStat		
	20	25	25	30	30	35	35	35	FabricAir® PUR 100		
	20	25	25	30	30	35	35	35	FabricAir® PUR 75		



Follow steps 1-3 to get an idea of the suitable fabrics and flow models. Then proceed to the next page (steps 4-8).

STEP 2
Find the row with your NC level (in the column under your design pressure).

STEP 1
Consider your admissible noise level.

The NC level depends on the fabric, the hole size and the design pressure.

LowNoise™
If an exceptionally low noise level of NC 20 or less is required, please contact FabricAir® and ask for LowNoise™.

STEP 3
Make a note of the suitable fabrics and flow models that match your NC level. Proceed to step 4 on the next page.

Admissible Maximum Levels of Noise, NC

25-35	Private residences
25-35	Hotels/motels
25-35	Individual rooms or suites
25-35	Meeting/banquet rooms
35-45	Halls, corridors, lobbies
35-45	Service/support areas
25-35	Office Buildings
25-35	Executive and private offices
25-35	Conference rooms
25 (max)	Teleconference rooms
30-40	Open plan offices
40-45	Circulation and public lobbies

Hospitals and clinics

25-35	Private rooms
30-40	Wards
25-35	Operating rooms
30-40	Corridors
30-40	Public areas

Performing Arts Spaces

25 (max)	Drama Theatres
**	Concert and recital halls
25 (max)	Music teaching studios
35 (max)	Music practice rooms

Laboratories (with fume hoods)

45-55	Testing/research, minimal speech communication
-------	--

40-50	Research, extensive telephone use, speech communication
35-45	Group teaching
25-35	Churches, mosques, synagogues
**	With critical music programs

Schools

40 (max)	Classrooms up to 750 ft² [75 m²]
35 (max)	Classrooms over 750 ft² [75 m²]
35 (max)	Lecture rooms for more than 50 (unamplified speech)

Libraries

30-40	Libraries
-------	-----------

Continue on page 31...

