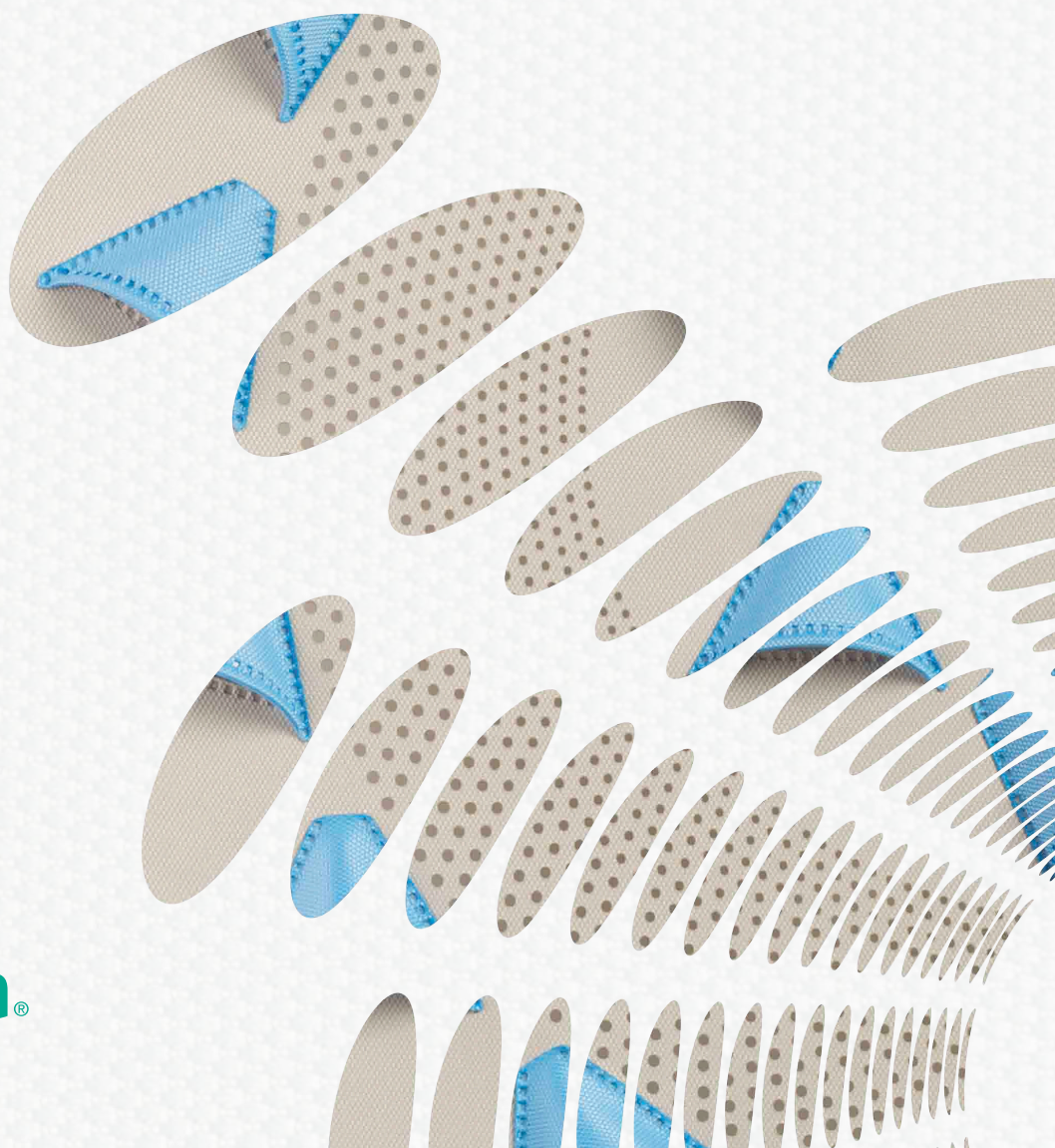


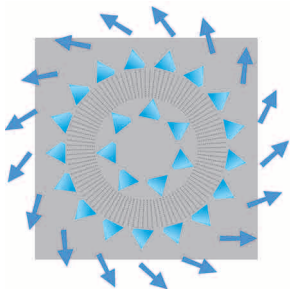
Fabric Tiles SquAireTex®

English version



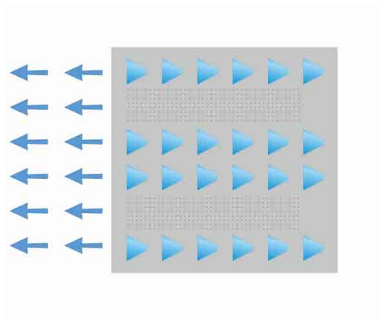
SquAireTex® fabric tiles are intended for use as diffusers for installation in false ceilings. Depending on the design they distribute air along a structure either in a swirling manner or into one or more directions. Apart from the aluminium frame they are made entirely of fabric, including the plenum box above the ceiling. The air passes through openings in the fabric, these are either laser cut perforations or pockets that are sonic welded to the fabric. The plenum boxes can be manufactured with an insulating layer to prevent condensation and to provide noise damping. They are available in any single colour, a selectable graphic pattern or colours combination.

TYPE RANGE:



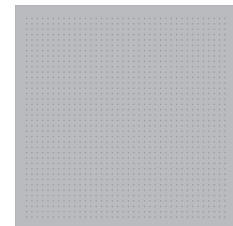
SquAireTex® swirl

Provides excellent blending of the supplied air with the surrounding air.



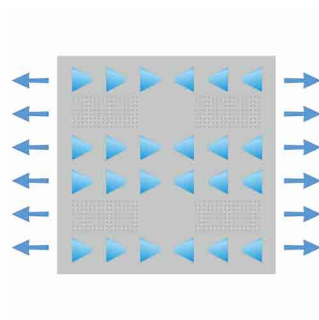
SquAireTex® flow 1 way

The air is distributed in a single direction.



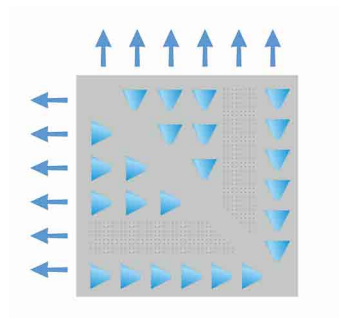
SquAireTex® perfo

Provides free air flow, in which the air is not routed into any direction.



SquAireTex® flow 2 way

The air is distributed in two opposite directions.

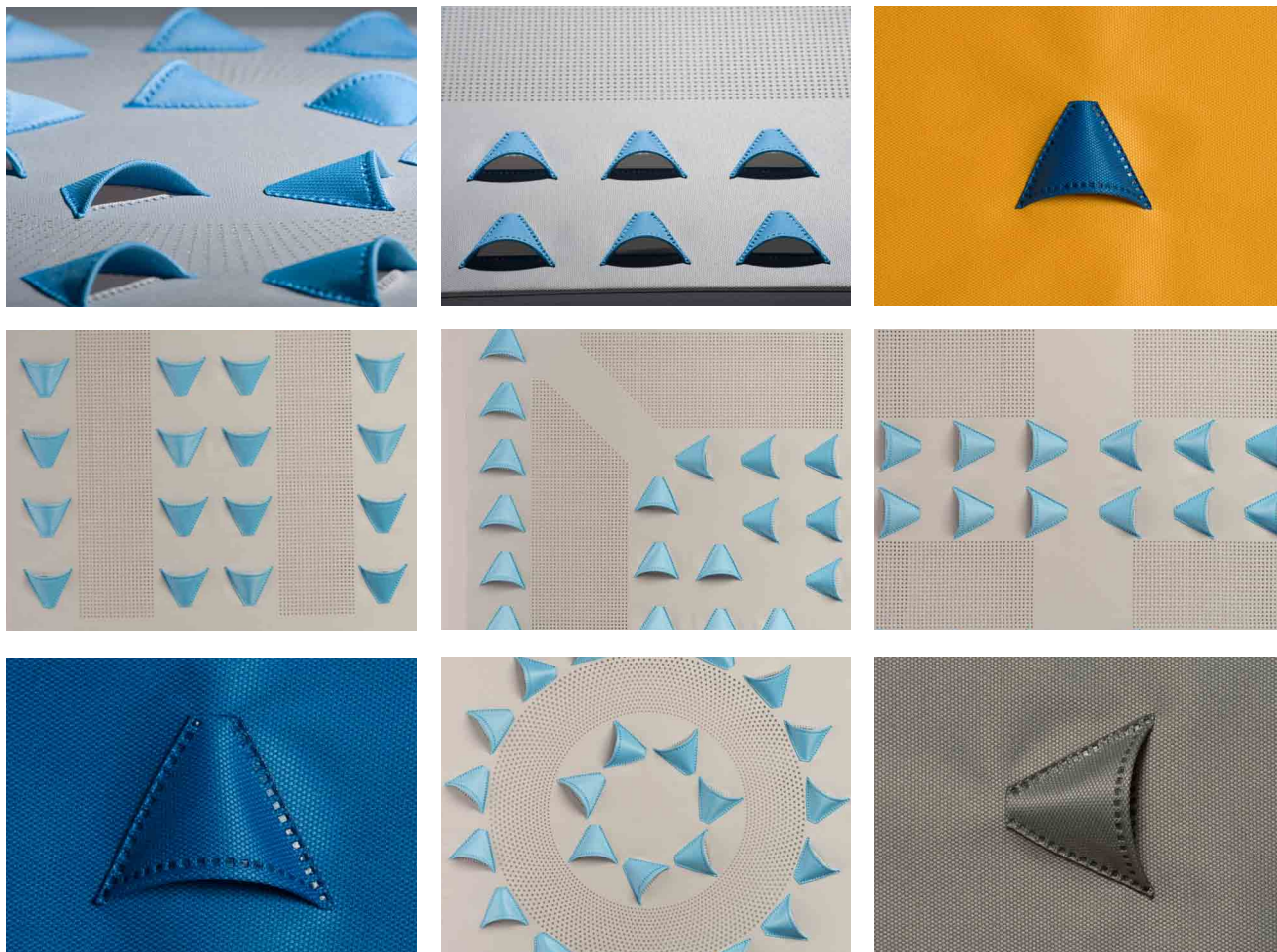


SquAireTex® flow corner


The air is distributed into two orthogonal directions.

PRINCIPLE OF SQUAIRETEX® DIFFUSERS

The desired flow is provided by specially designed pockets which are secured above the openings in the fabric. An optimised design of the opening and shape of pocket ensure that aerodynamic noise is minimal. Part of the supply air passes through the laser cut perforations (diameters of 2 - 3.5mm) and is induced to flow into the air pattern created by the pockets.



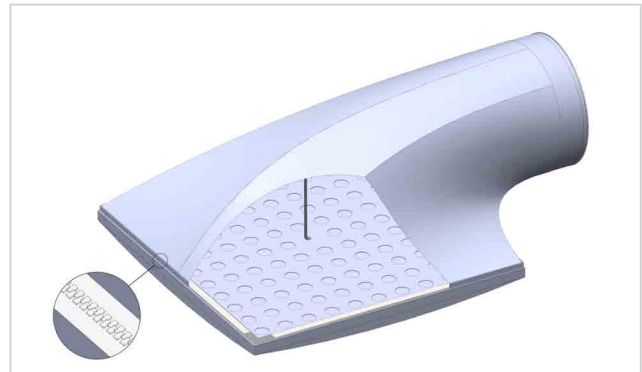
The Prihoda Classic fabrics used have excellent strength and durability and high resistance to fire.

COMPOSITION	100% polyester + polyurethane coating on the reverse side Endless fibres (multifilament)		
WEIGHT	230	g/m²	
THICKNESS	0.31 mm	mm	
CHARACTERISTICS	Suitable for clean rooms - Class 4 (EN ISO 14644-1)		
STRENGTH OF WARP / WEFT	1810 / 1090 N (EN ISO 13934-1)		
FIRE RESISTANCE	B-s1, d0 (EN 13501-1: 2003), Certified to UL 723		
THERMAL RESISTANCE	-30	+110	°C
WASHING SYMBOLS	 Machine washable, including the plenum box		

Special shape of the plenum box is designed to ensure proper air routing and minimum pressure loss.

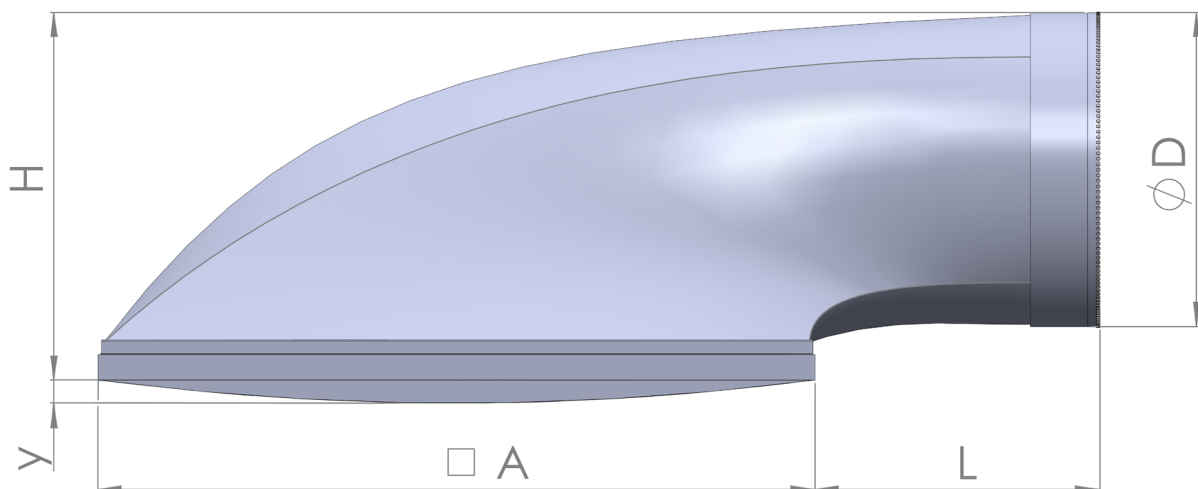
A uniform discharge through the fabric tile is ensured by the equaliser, an intermediate layer of fabric with large holes which spreads the air equally across the tile.

Using split zips the direction of flow from the Flow type diffusers can be altered.



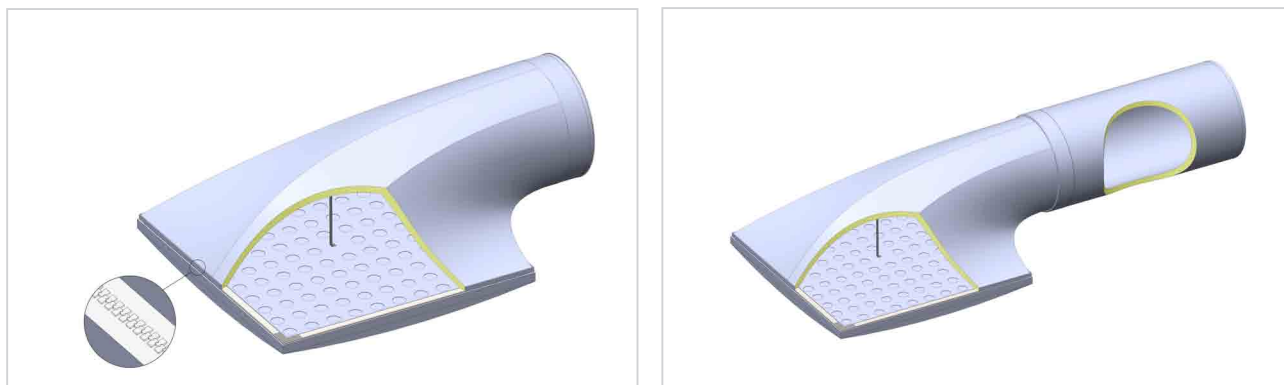
SUMMARY OF BASIC DIMENSIONS

SquAireTex	□ A [mm]	H [mm]	øD [mm]	L [mm]	30 Pa [m³/h]	y _{max} [mm]	Weight [kg]	Sound power L _{WA} at 30 Pa [dB]
400	395	250	200	200	180	15	1	22.9
500	495	250	200		365	20	1.2	30.9
600	595	300	250		545	25	1.3	34.9
625	620	300	250		565	25	1.4	35.9
825	820	350	300		775	35	2	40.9

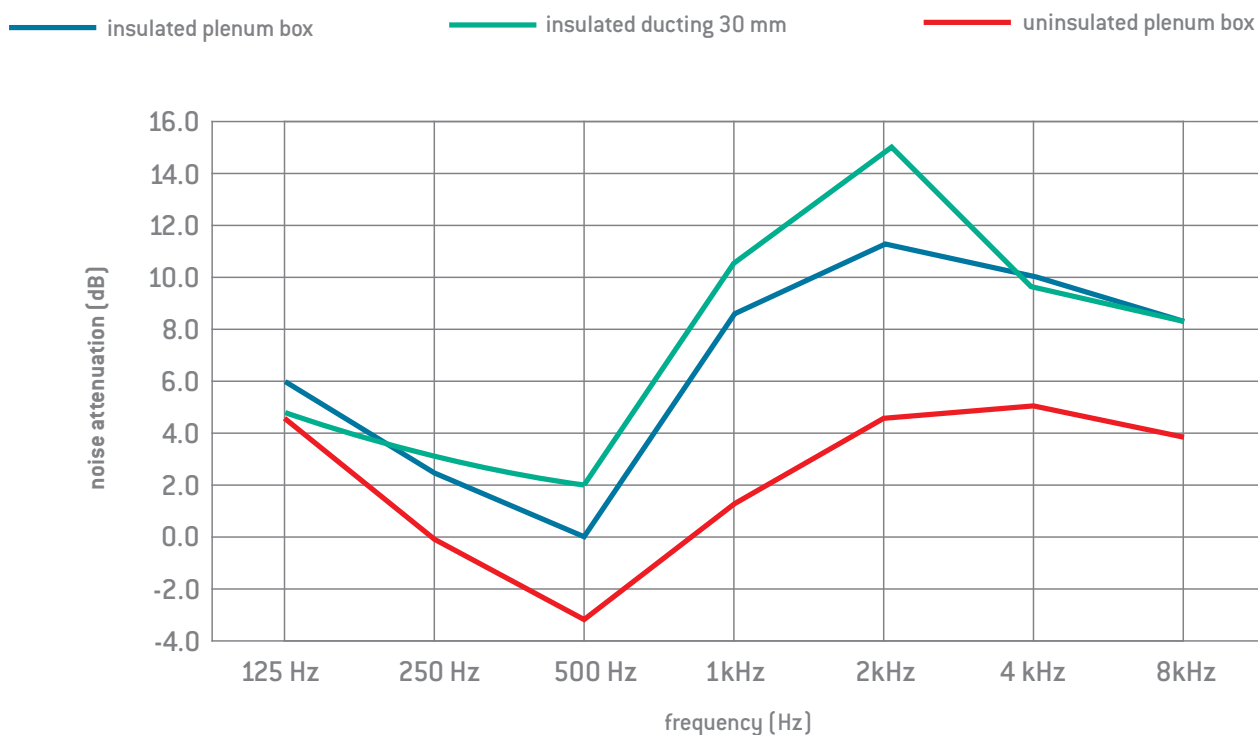


INSULATION

For insulating the connection we are using nonwoven fabric with high fire resistance. In cases of high requirements for noise reduction a superposed noise dampener of the same material can be provided.



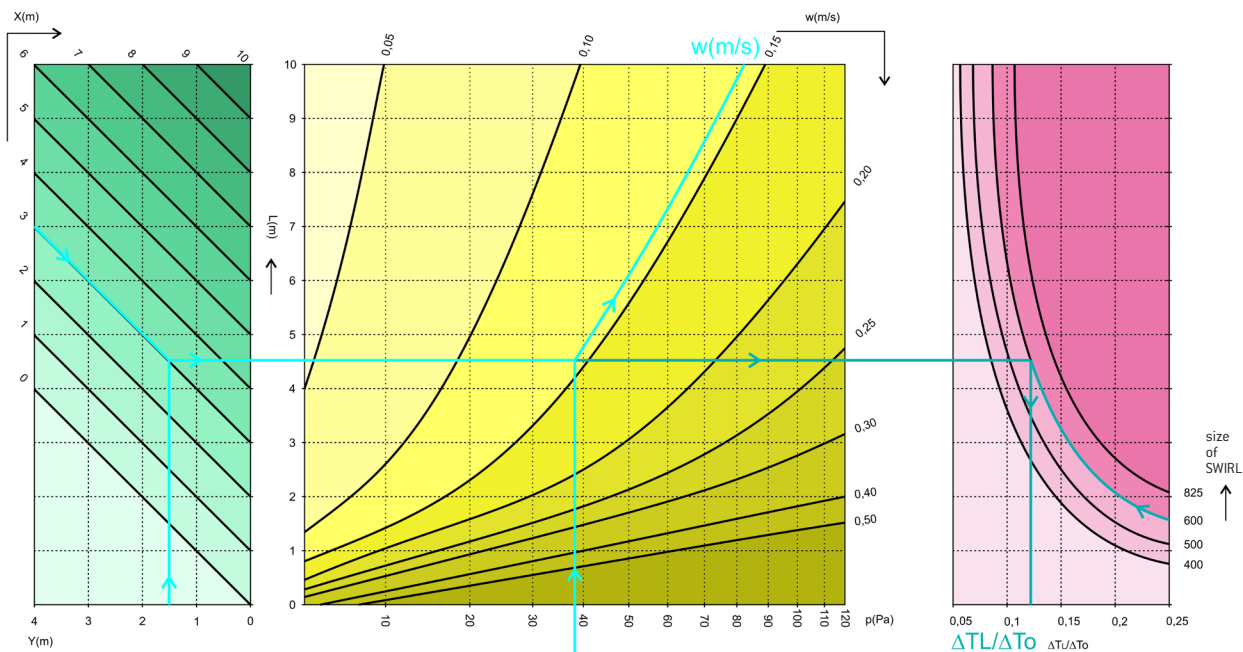
SOUND ATTENUATION IN FREQUENCY BANDS



ATTENUATION VALUES (DB) IN FREQUENCY BANDS (HZ)

Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
INSULATED PLENUM BOX	6.0	2.4	0.1	8.7	11.5	10.4	8.2
INSULATED DUCTING 30 mm D255/m	5.0	3.1	2.0	10.7	15.0	9.8	8.4
UNINSULATED PLENUM BOX	4.6	-0.1	-3.2	1.8	4.5	4.9	3.9

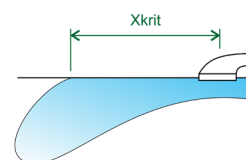
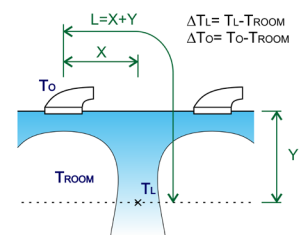
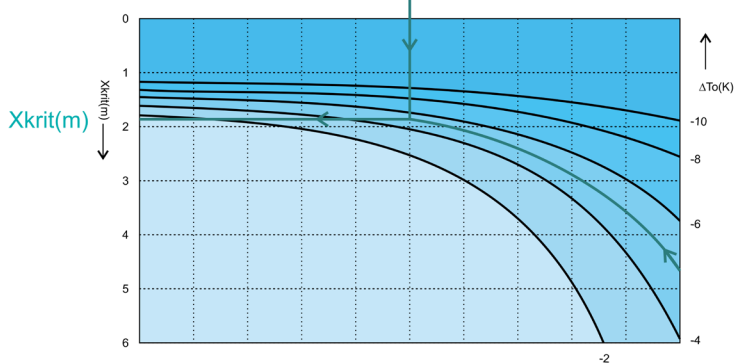
DESIGN DIAGRAMS - SquAireTex® swirl



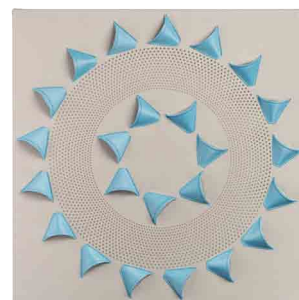
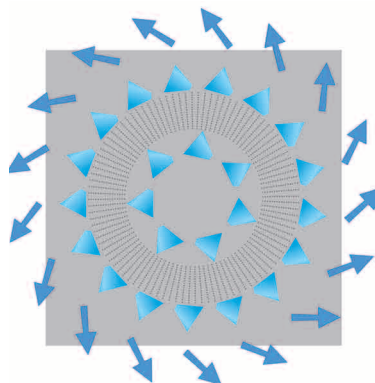
Example
Input data:
SAT Swirl 600
 $X=A/2=3m$
 $Y=1,5m$
 $V=560m^3/h$
 $\Delta To=-5K$

Output data:
 $p=38Pa$
 $Lwa=38,5dB$
 $w=0,145m/s$
 $Xkrit=1,9m$
 $\Delta TL/\Delta To=0,12$

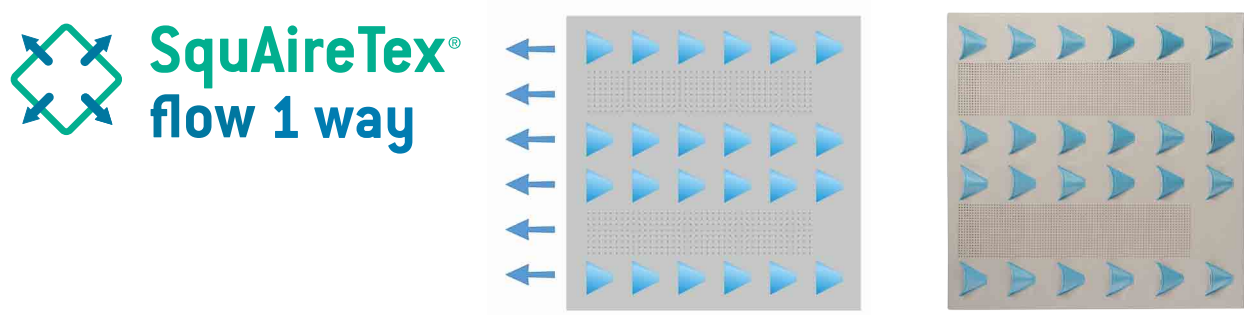
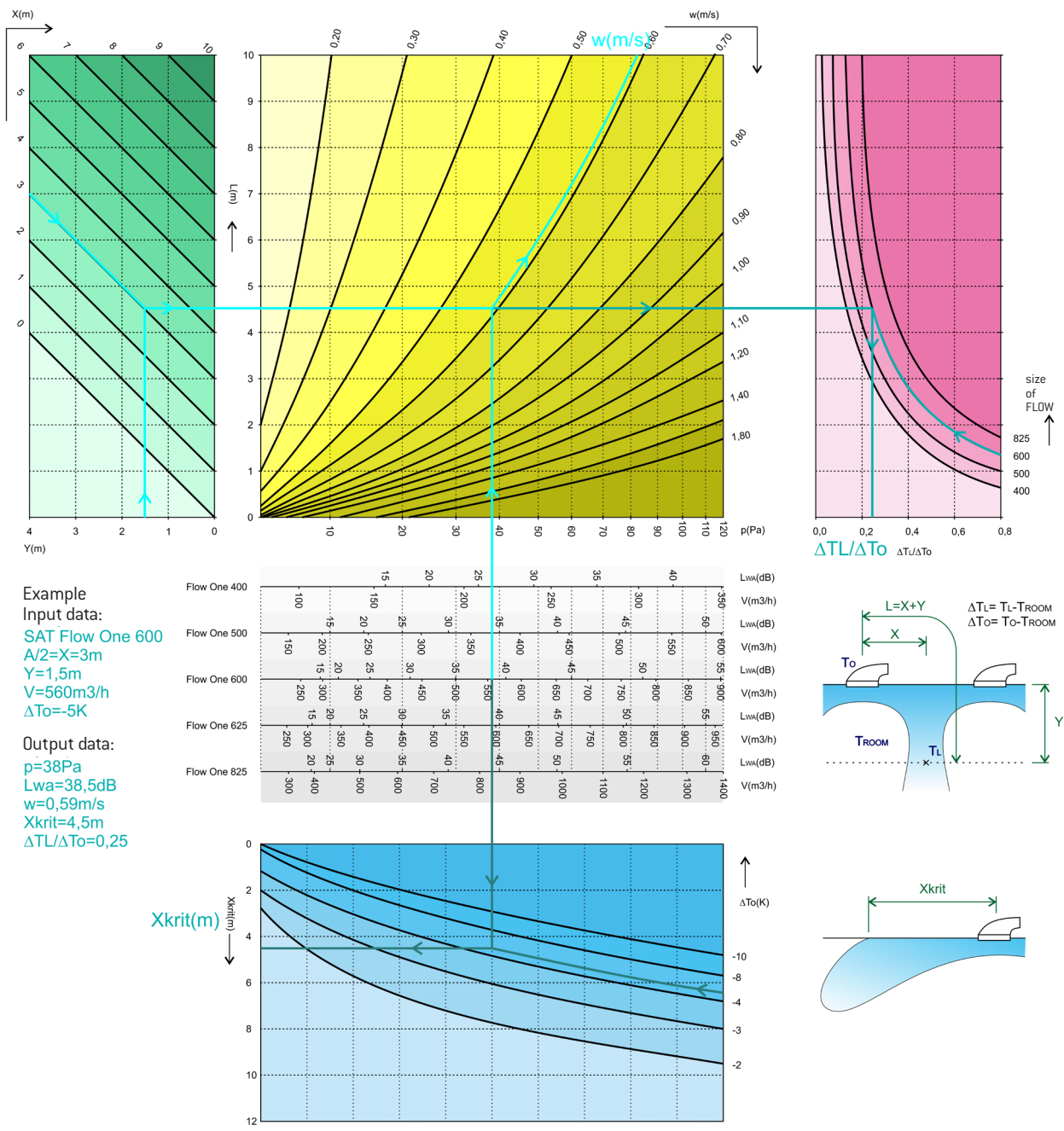
Swirl 400	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
Swirl 500	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
Swirl 600	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155
Swirl 625	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160
Swirl 825	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165



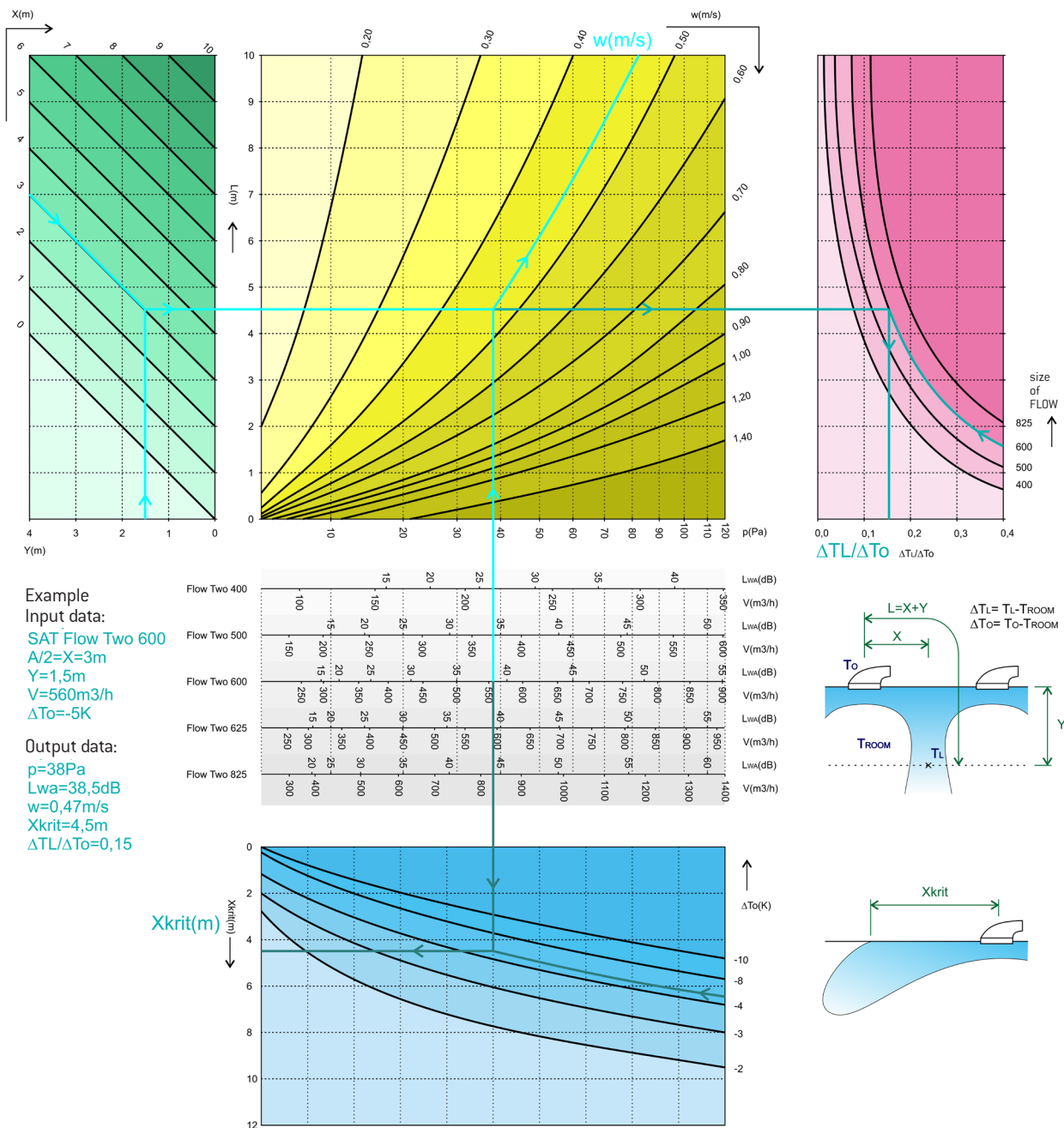
SquAireTex®
swirl



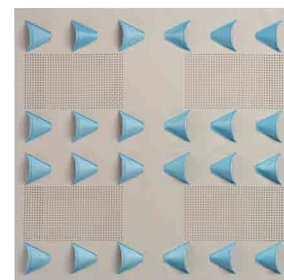
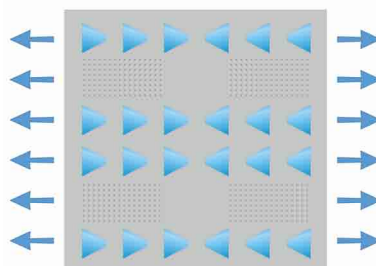
DESIGN DIAGRAMS - SquAireTex® flow 1 way



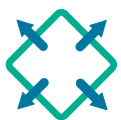
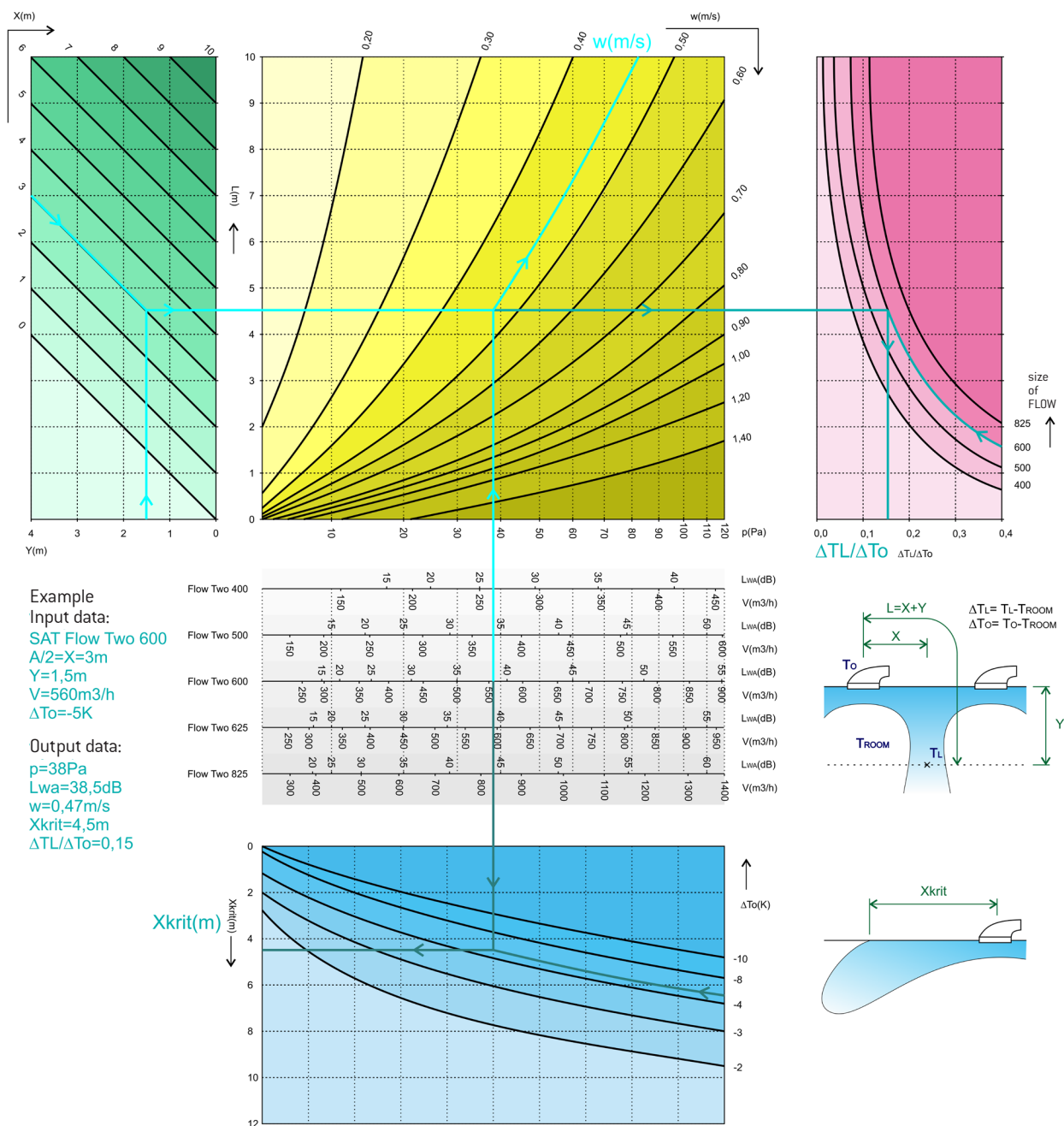
DESIGN DIAGRAMS - SquAireTex® flow 2 way



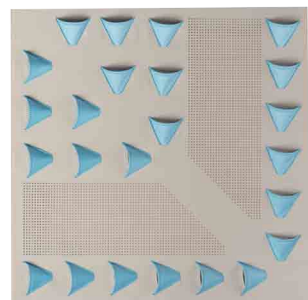
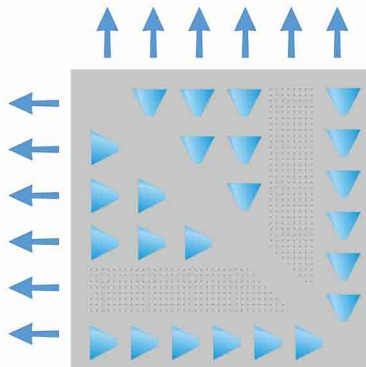
SquAireTex®
 flow 2 way



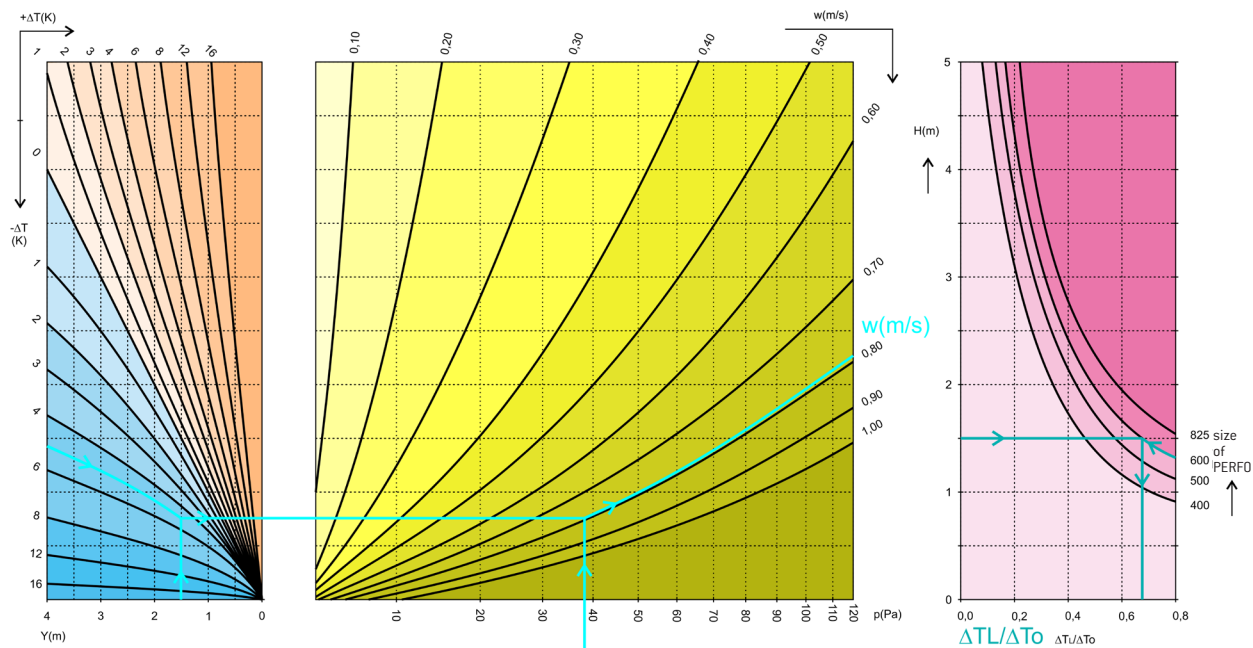
DESIGN DIAGRAMS - SquAireTex® flow corner



SquAireTex®
flow corner

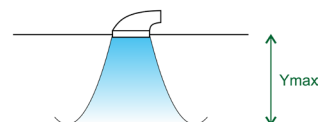
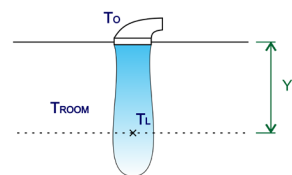


DESIGN DIAGRAMS - SquAireTex® flow perfo

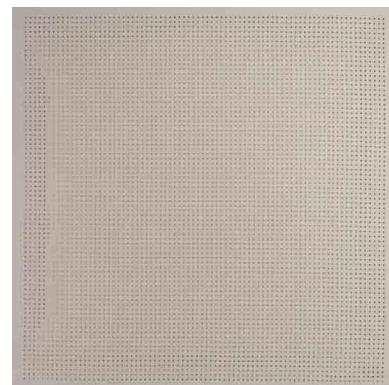
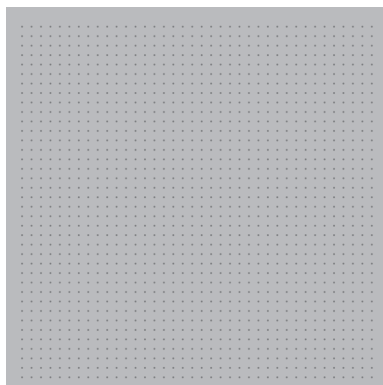


$$\Delta T_L = T_L - T_{ROOM}$$

$$\Delta T_o = T_o - T_{ROOM}$$



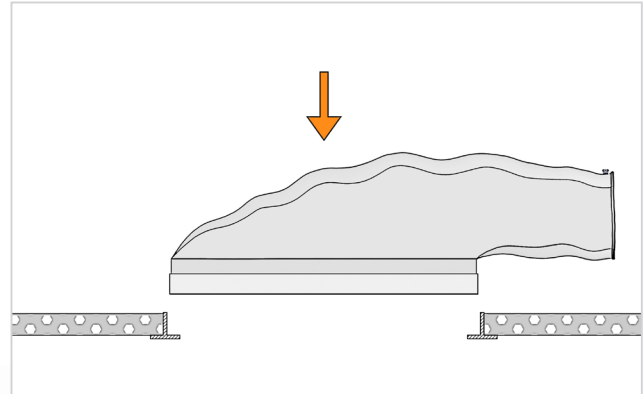
SquAireTex®
perfo



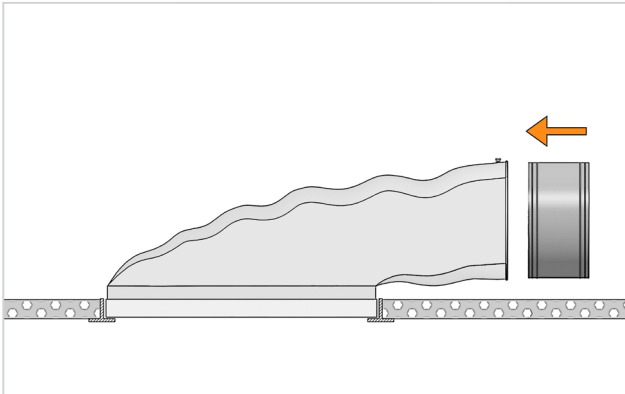
INSTALLATION INSTRUCTIONS

Installation of the SquAireTex® diffusers is easy - simply insert them in the structure of a false ceiling. No anchoring is required due to low weight.

STEP 1

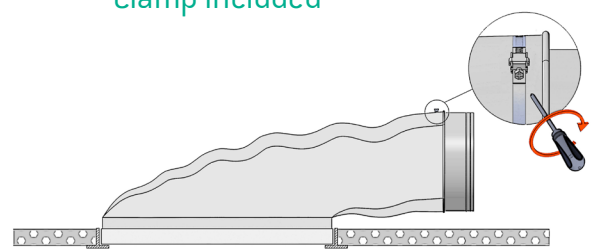


STEP 2

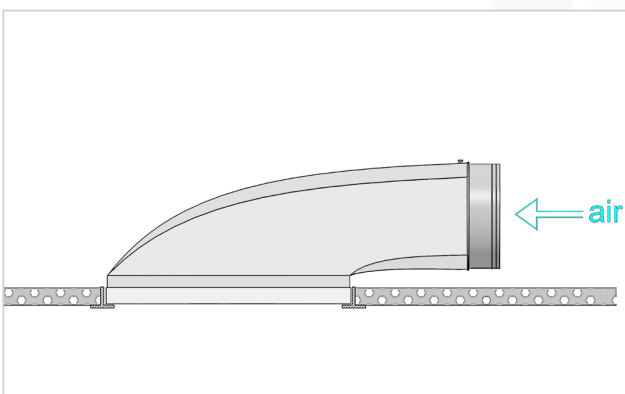


STEP 3

Clamp included



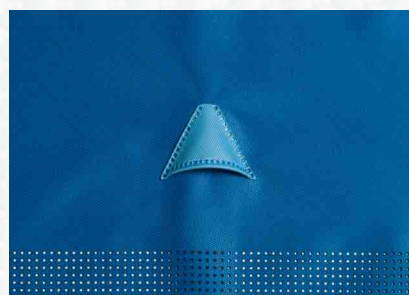
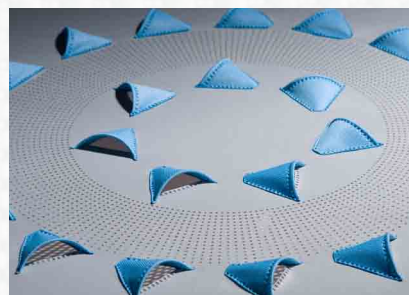
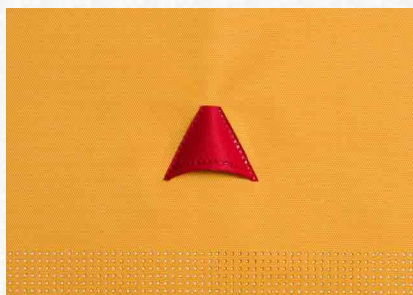
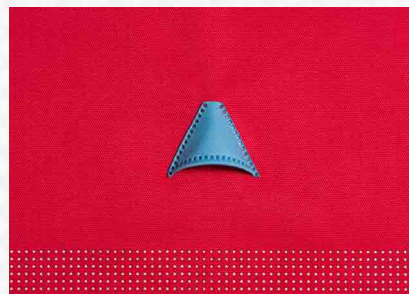
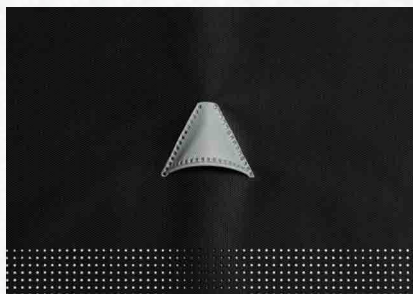
STEP 4



ADVANTAGES OF SQUAIRETEX® DIFFUSERS

- Fast installation
- Low weight
- Cost savings
- Bespoke dimensions and appearance
- Easy cleanability
- Recycled material (optional)

The SquAireTex® diffusers save time during installation as well as storage and transportation costs. Enhance interiors by a suitable choice of colours or a selectable graphic pattern. Easy and perfect cleaning by washing. Can be made of 100% “post-consumer” recycled material.



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