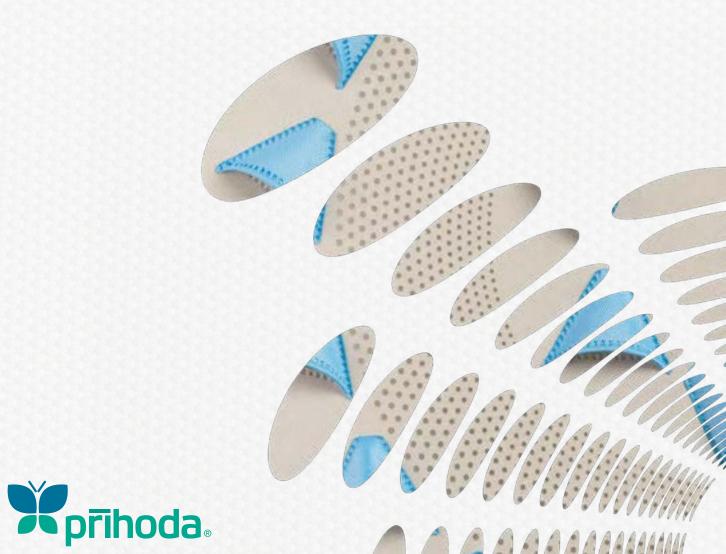
# Fabric Tiles SquAireTex®

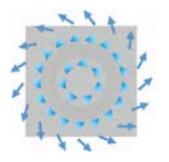
**English version** 



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:**

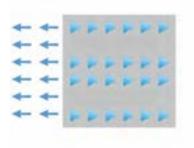




#### SquAireTex® swirl

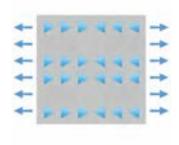
Provides excellent blending of the supplied air with the surrounding air.





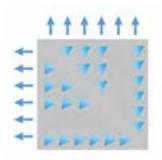
#### SquAireTex® flow 1 way

The air is distributed in a single direction.



#### SquAireTex® flow 2 way

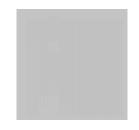
The air is distributed in two opposite directions.



## $\textbf{SquAireTex}^{ @} \textbf{ flow corner}$

The air is distributed into two orthogonal directions.



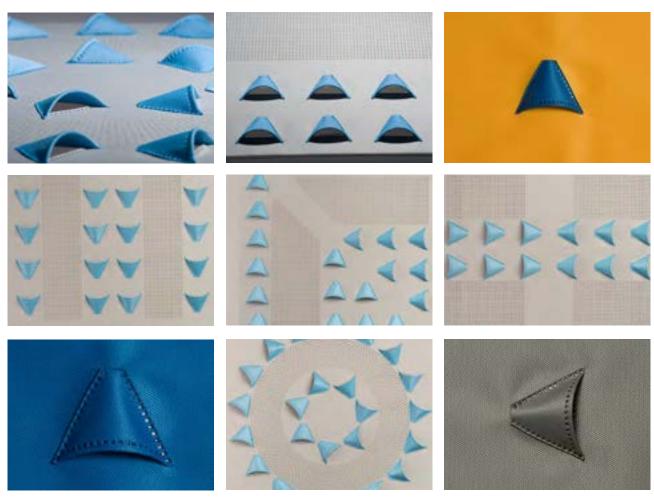


#### SquAireTex® perfo

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

## 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.

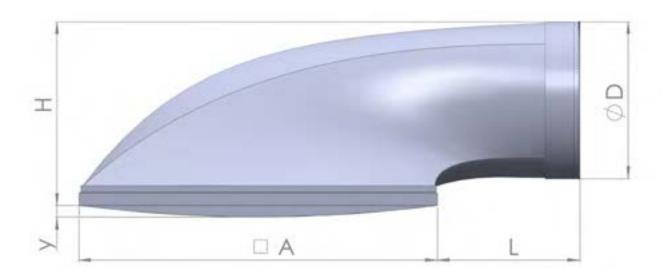






## **SUMMARY OF BASIC DIMENSIONS**

| SquAireTex | □ A<br>[mm] | H<br>[mm] | øD<br>[mm] | L<br>[mm] | 30 Pa<br>[m³/h] | y <sub>max</sub><br>[mm] | Weight<br>[kg] | Sound power L <sub>wa</sub><br>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   |



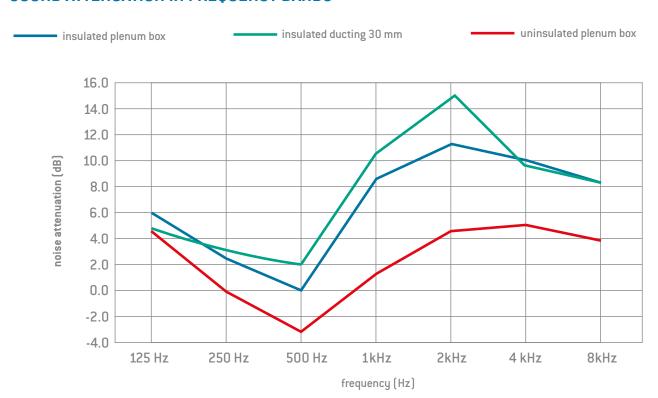
## **INSULATION**

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.





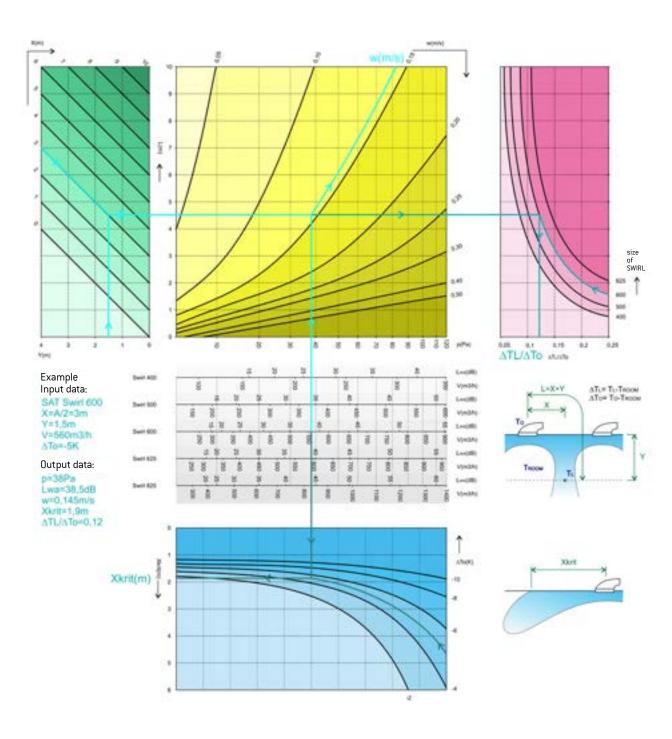
## **SOUND ATTENUATION IN FREQUENCY BANDS**



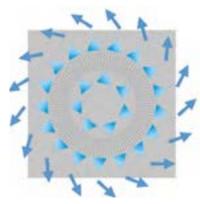
# ATTENUATION VALUES (DB) IN FREQUENCY BANDS (HZ)

| 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<br>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**

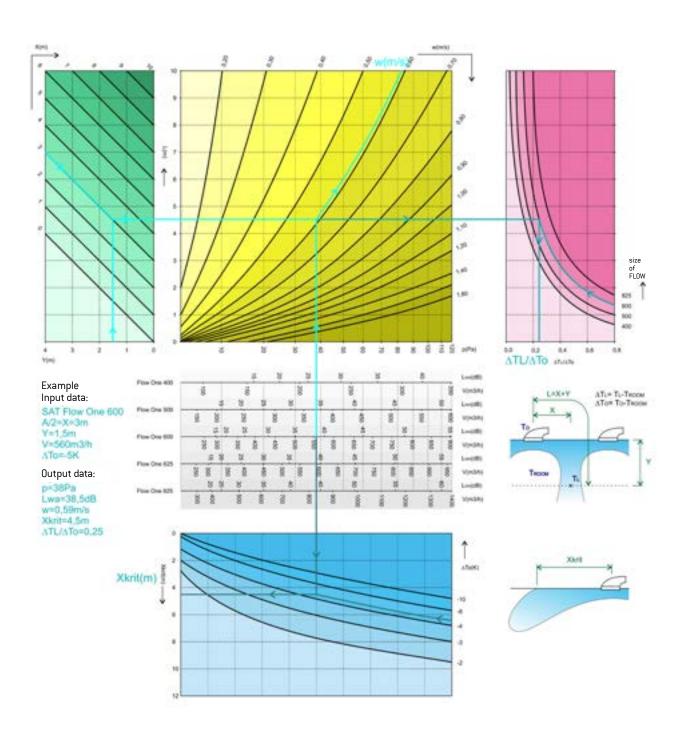




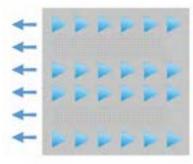




## **DESIGN DIAGRAMS - SquAireTex® flow 1 way**

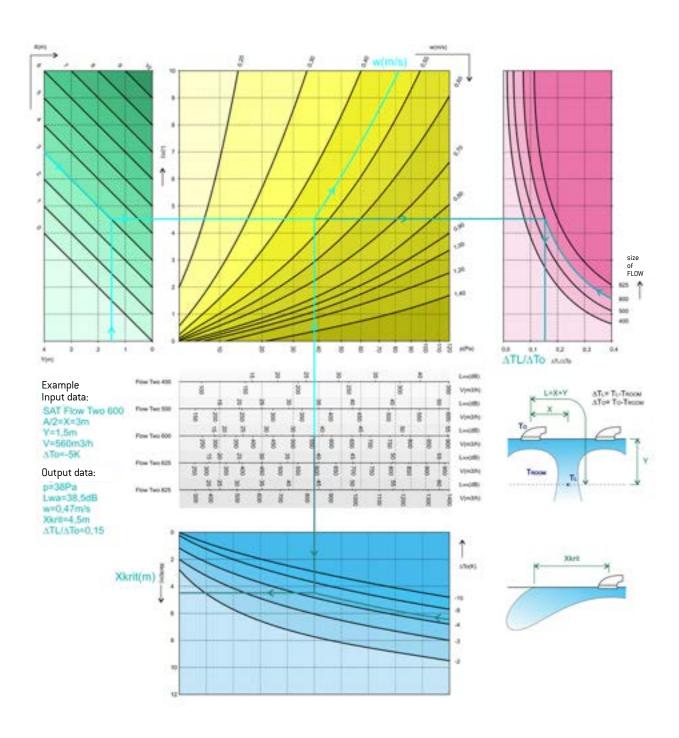




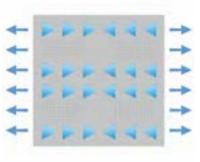




## **DESIGN DIAGRAMS - SquAireTex® flow 2 way**

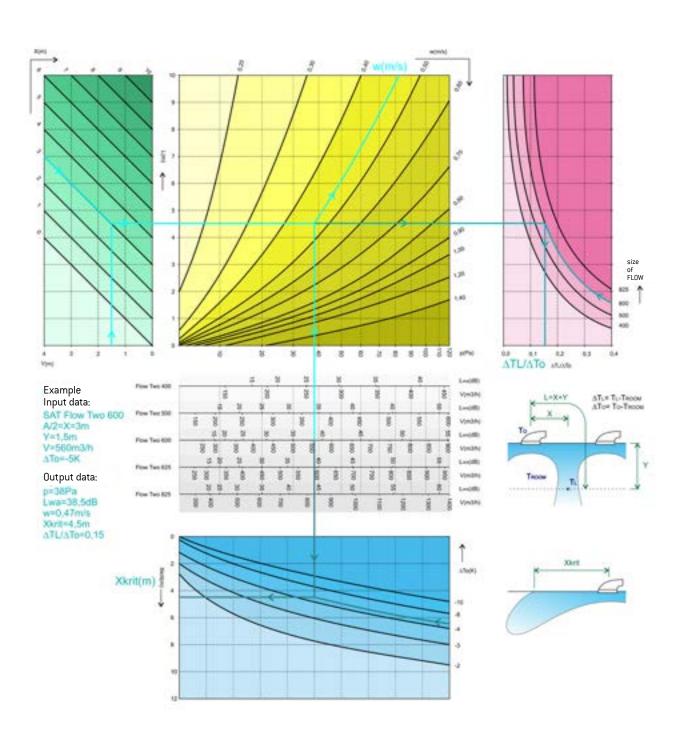




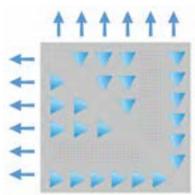




## **DESIGN DIAGRAMS - SquAireTex® flow corner**

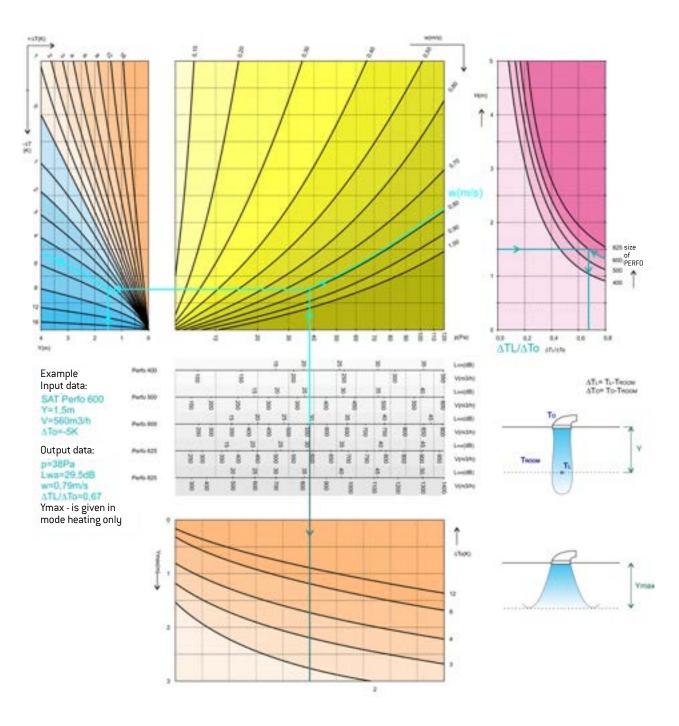




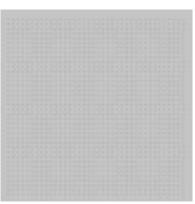




## **DESIGN DIAGRAMS - SquAireTex® flow perfo**



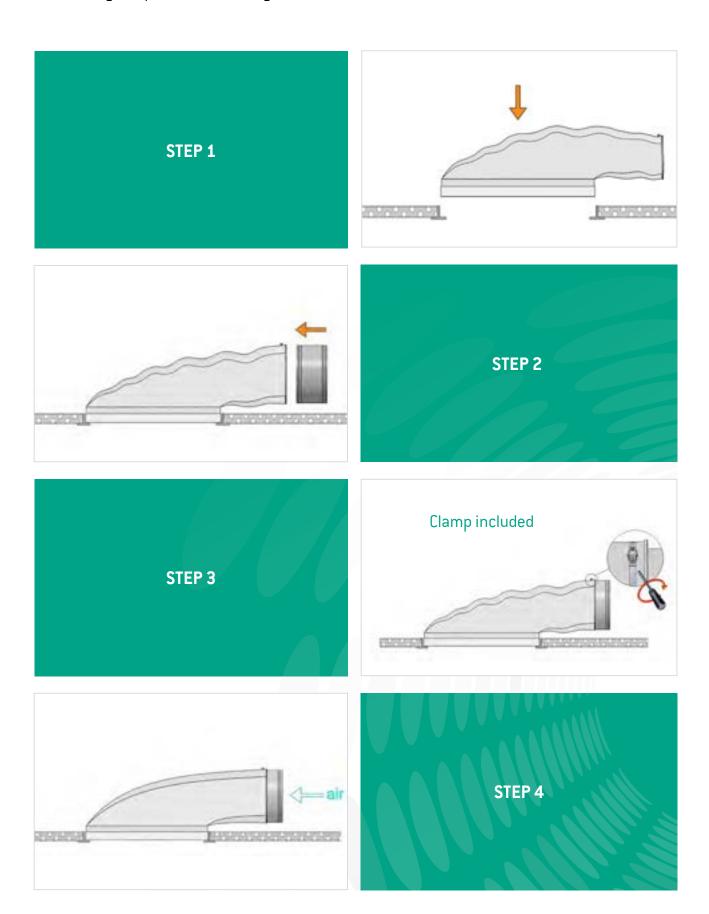






## **INSTALLATION INSTRUCTIONS**

Installation of the SquAireTex $^{\circ}$  diffusers is easy - simply insert them in the structure of a false ceiling. No anchoring is required due to low weight.

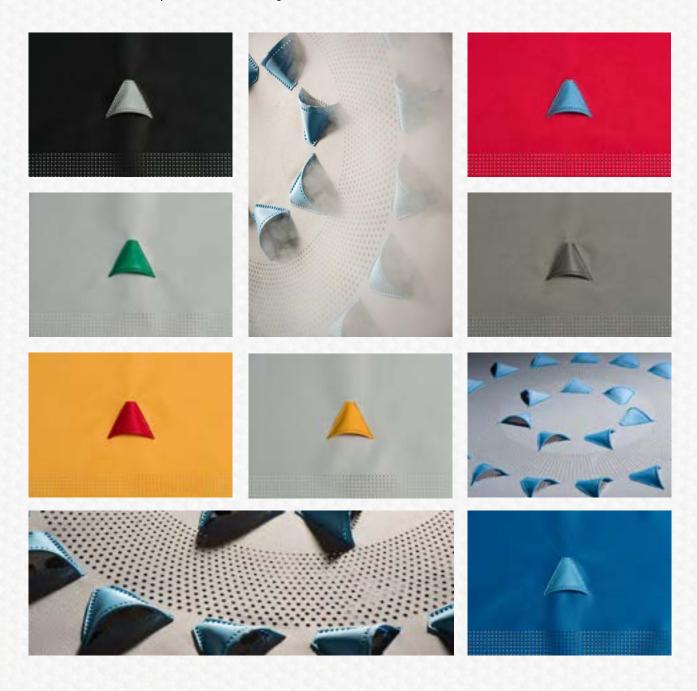


#### **ADVANTAGES OF SQUAIRETEX® DIFFUSERS**

- 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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