

# Swirl Diffusers

## Aesthetic swirl diffusers for ceiling tiles



Green Product

Twisted 850 air supply diffuser for ceiling tiles

### Advantages

- Can be installed to replace a suspended ceiling tile 600 x 600 or 675 x 675mm.
- Adapted version for staff/BA13 plasterboards.
- Blends perfectly with the majority of ambience fittings in commercial premises.
- Ideal for variable airflow systems.
- Excellent high level air circulation.
- Supports large temperature differences.
- Models of supply and return are identical.
- Easy access to the filter on the exhaust model.

### APPLICATION

- Ceiling mounted diffuser designed to replace a 600 x 600 or 675 x 675 mm suspended ceiling tile.
- Adapted version for staff/BA13 plasterboards.
- Air supply or exhaust, fixed high induction diffusion by swirl diffusers.
- Large airflow range on a single dimension of diffuser.
- Heating and air-conditioning installations requiring high air circulation levels.
- Ideal for the supply of cold or hot air (air conditioning) with large temperature gaps and low ceiling heights.
- Ideal for variable airflow installations (duct-mounted fan coil units type or VAV).

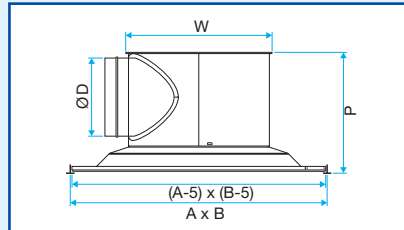
### DESCRIPTION

#### Design

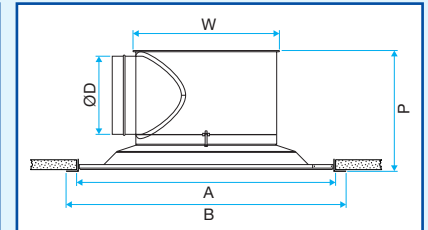
- Diffusion of high induction air by the rotation of an air jet inside the plenum.

The diffusion cone, by maintaining a sufficient speed of ejection, ensures a perfect Coanda effect (ceiling effect) and a helicoid air pattern. It is this swirl effect (or helicoid air pattern) that will induce the movement of the ambient air, and thus mix it with the supply air to guarantee great homogeneity of temperatures in the occupied area.

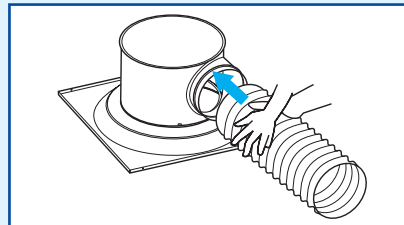
### DIMENSIONS



Twisted 850 diffuser for ceiling tiles



Twisted 850 diffuser for staff or BA13 plasterboards



Flexible duct connection

#### Diffusers for suspended ceilings

##### Comfort airflow levels for $L_w < NR 35$ and dimensions

Mounting	A x B* (mm)	Réservation A (mm)	B (mm)	Ø W (mm)	Ø D (mm)	P (mm)	Airflow (m <sup>3</sup> /h)
Suspended ceilings	600 x 600	-	-	366	200	298	150 to 600
	675 x 675	-	-	366	200	298	150 to 600
Staff / BA13	-	600 x 600	630 x 630	366	200	298	150 to 600

\* Nominal ceiling tile dimensions. See selection table on page 241.

### STANDARD RANGE R10 - Diffusers for suspended ceilings

Dimensions	Air exhaust diffuser with filter Twisted 850 W 600 x 600 Code	Air supply diffuser Twisted 850 600 x 600 Code	Spare filter W 850 Code
Ø 200	11051162	11051161	11053949

# Swirl Diffusers

## Aesthetic swirl diffusers for ceiling tiles



Twisted 850 air supply diffuser for staff / BA13 plasterboards



Twisted 850 diffuser with filter for air exhaust

### Advantages

- Can be installed to replace a suspended ceiling tile 600 x 600 or 675 x 675mm.
- Adapted version for staff/BA13 plasterboards.
- Blends perfectly with the majority of ambience fittings in commercial premises.
- Ideal for variable airflow systems.
- Excellent high level air circulation.
- Supports large temperature differences.
- Models of supply and return are identical.
- Easy access to the filter on the exhaust model.

### DESCRIPTION

- Diffusion cone and central disk made of painted steel.
- Steel compensation plate adapted to 600x600 mm or 675x675 mm ceiling panels, with "Tbar" or "Fine-Line" frames.
- Mounting frame aesthetic (white aluminum) for staff version.
- Air supply model fitted with a fixed central plate, serving as a deflector.

NB: On staff version, the central plate is opening for easy installation in plasterboard ceilings.

- Return air model fitted with a removable central plate and an elliptical filter. Access to the filter by quick and easy opening of the central disk.
- Galvanized steel cylindrical plenum for direct connection to a 200 mm-diameter circular duct.
- Version without plenum available for direct return air or direct connection to D200 or D250 circular connection. Non-opening diffuser only.

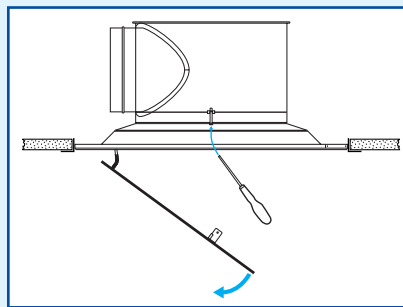
Warning: this model can not be used for air supply.

- Powder coated RAL9010 matt 30%.

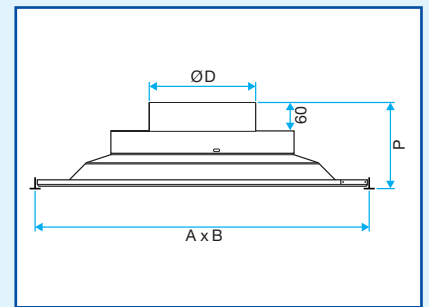
### ACCESSORIES

- G2 efficiency elliptical flat filter in compliance with the HQE label supplied with the return air diffuser. M1 fire protection rating
- Mounting frame aesthetic (white aluminum) for staff version.
- Bridge system to facilitate the implementation of non-removable ceilings (F7 fixing).
- Acoustic insulation (15mm-thick M1 melamine foam inside the plenum).
- Thermal insulation (5mm M1 polyurethane foam outside the plenum).

### DIMENSIONS



Implementation of the Twisted, staff with the F7 bridge



Twisted 850 direct return air diffuser.

#### Comfort airflow levels for Lw < NR 35 and dimensions.

Dimensions A x B* (mm)	Ø D (mm)	P (mm)	Airflow (m <sup>3</sup> /h)
600 x 600	200 or 250	170	150 to 600
675 x 675	200 or 250	170	150 to 600

\* Nominal ceiling panel dimensions. See selection table on page 241.

### RANGE WITH CHOICE OF OPTIONS R10

Dimensions	Reported aesthetic framework for Twisted 850 Code	Direct return air diffuser Twisted 850 Code	Air return diffuser with filter Twisted 850 W Code	Air supply diffusers Twisted 850 Code	Air supply diffusers Twisted 850 Code
600x600 tiles		11003366	11003362		11003361
675x675 tiles		11003368	11003364		11003363
600x600 staff	11003379		11003372	11003371	

### OPTIONS

Option	Option
For Tbar or Fine Line type ceilings (for suspended ceiling models only)	Acoustic insulation
F7 bridge system (staff version only)	Acoustic + thermal insulation
Epoxy paint according to RAL colour chart.	D200 or D250 connection on direct air return