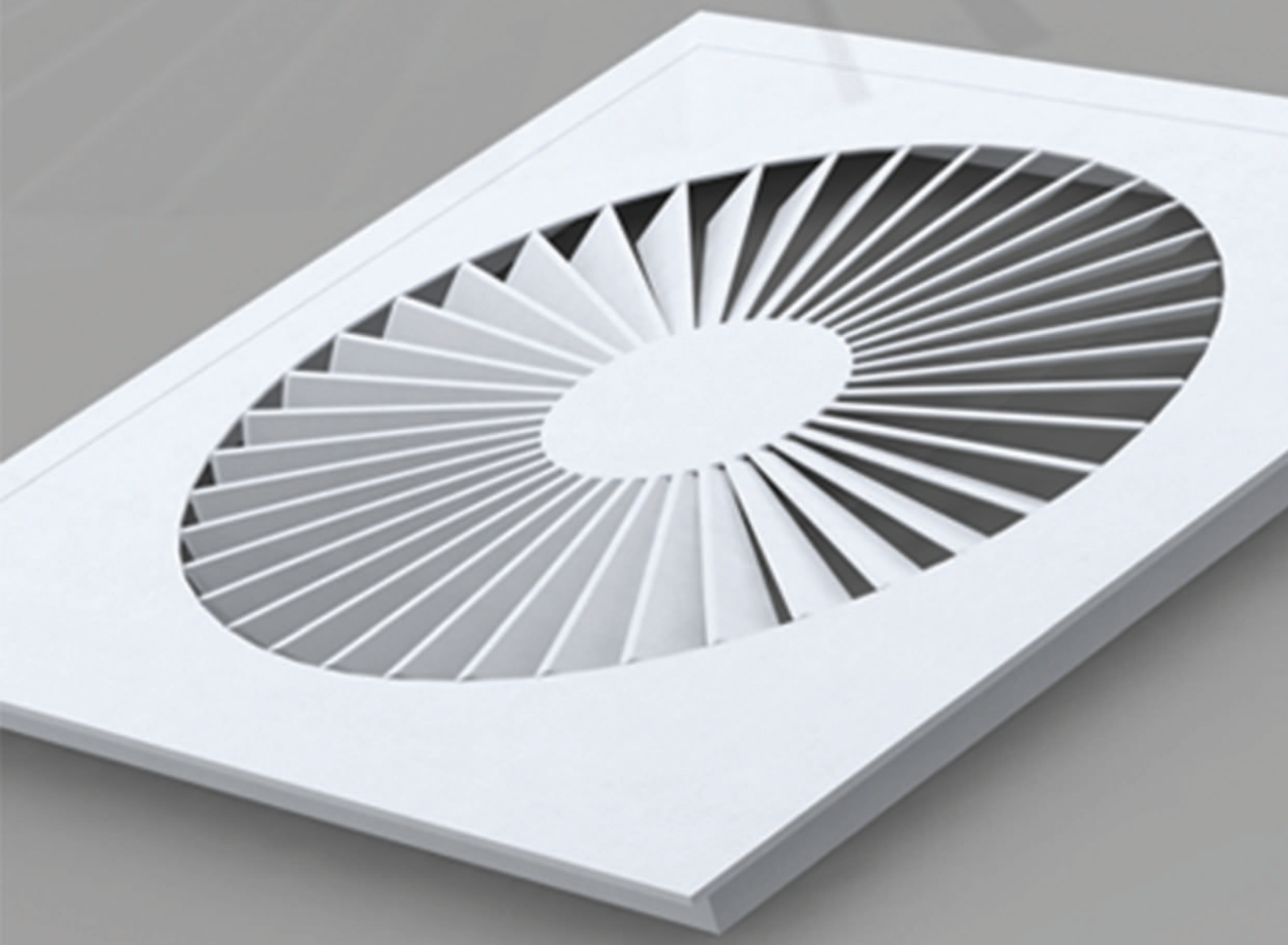
WELCOME TO

Egy Air is a leading manufacturer in Egypt and Sudan of central air conditioning and natural ventilation solution

We aim to supply the highest qualite products and manufacturing efficient designs with new technologies and energy - saving and comforble ventilation in all types
of buildings

We offers a choice of chipping plans to meet your needs while providing more than
completive pricing

STAMPED SWIRL DIFFUSER



Out standing technique for highest demands Unique in comfort, acousrics and design

Construction

Frame

Made from High Quality extruded aluminum Profile with 30 mm flange width1.2 mm (or)1.5 mm thick aluminum sheet.

Blade

A radial array of deflection blades are pressed into a square panel.

Neck

Standard size 250 dia.

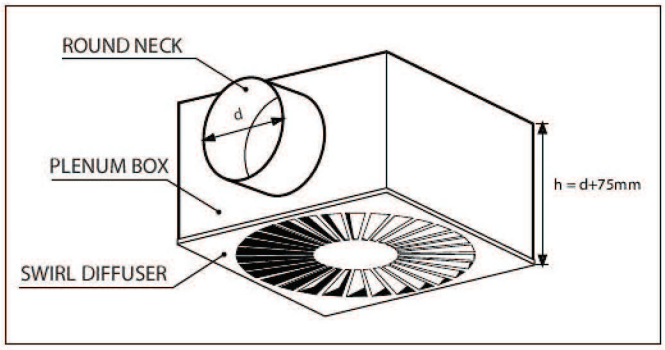
Module

600 mm × 600 mm, 595 mm × 595 mm.

Plenum

20 gauge (or) 22 gauge thick GL sheet.

Description

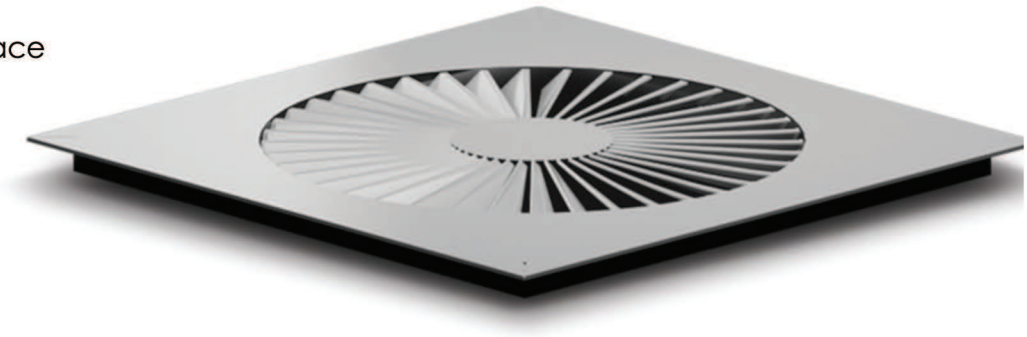


- The frame and blades are made from high quality extruded aluminum profiled construction with Powder coated color finish.
- Supply swirl diffuser and return swirl diffuser can be supplied with volume damper to control static pressure and the air volume flow rate; installed in plenum box.
- The fixed swirl diffuser used for the supply of cooled or heated air.
- A high induction is obtained by the exceptional swirl discharge this quickly reduces the difference in temperature and velocity of the induced air.
- Suitable for VAV terminal boxes.
- This diffuser can also be used for exhaust.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Powder coated color finish per RAL color codes as standard and flexibility of finish.

Variants

FSD - Q :

Square diffuser face



FSD - R :

Circular diffuser face

Connection

H:

Horizontal duct connection

V:

Vertical duct connection

Parts & Characteristics

- Circular or square diffuser face.
- Diffuser faces with radially arranged fixed air control blades.
- Plenum box for supply air with an optimized equalizing element that ensures a uniform airflow through the diffuser face.
- Simple installation of the diffuser face due to central fixing screw with decorative cap.
- Damper blade for volume flow rate balancing (optional).

Attachments

- Damper blade for volume flow rate balancing or square diffuser face.
- Pressure tap and cord - operated damper blade for volume flow rate balancing with the diffuser face in place.

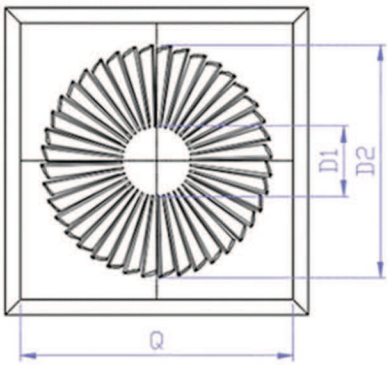
Accessories

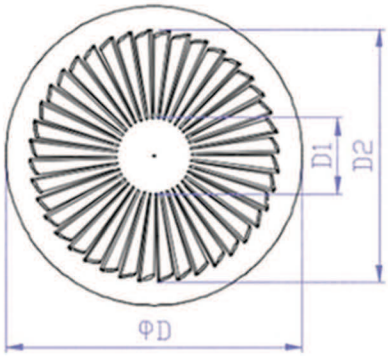
- Lip seal.

Materials & surfaces

- Diffuser face made of galvanized sheet steel.
- Plenum box and cross bar made of galvanized sheet steel.
- Plenum box and made of plastic and galvanized sheet steel.
- Lip seal made of rubber.
- Diffuser face powder - coated RAL 9010 pure white or any other color code.

Dimension



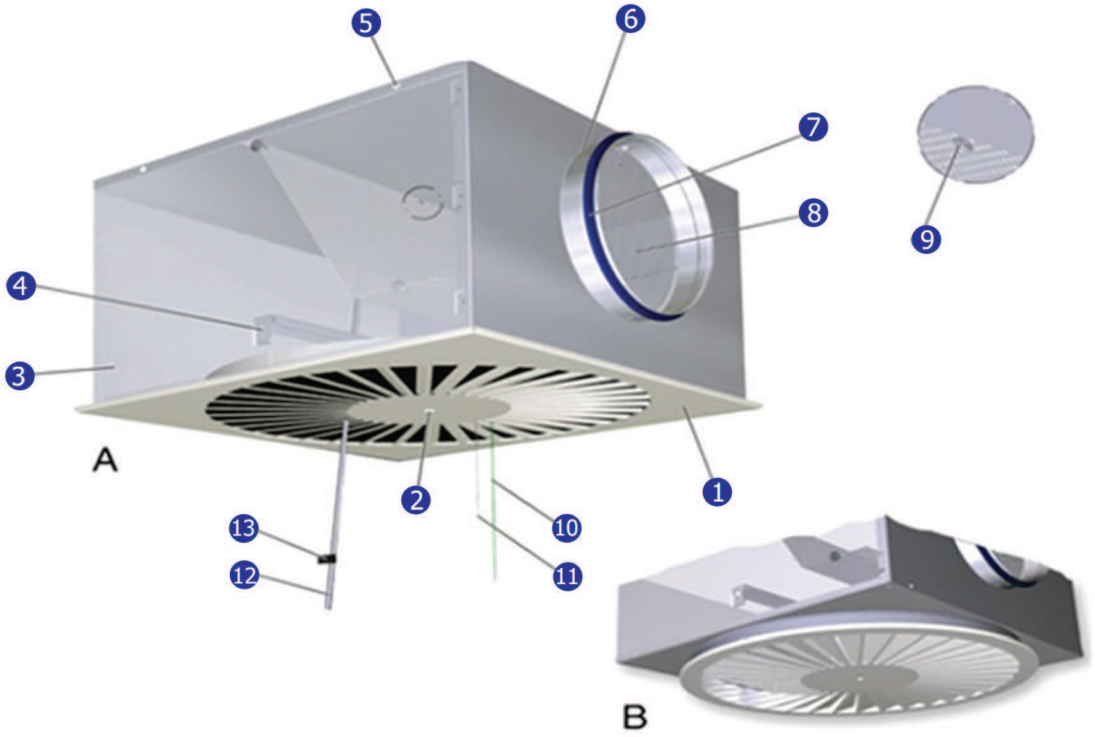


Normal Size	D1	D2	Q	ΦD	Aeff
	mm	mm	mm	mm	m 2
400	130	350	398	400	0.0138
600	200	500	598	600	0.034

Technical Information

- Ceiling swirl diffusers in air conditioning systems create a swirl to supply air to rooms.
- The resulting airflow induces high levels of room air, thereby rapidly reducing the airflow velocity and the temperature difference between supply air and room air.
- Ceiling swirl diffusers allow for large volume flow rates.
- The result is a mixed flow ventilation in comfort zones, with good overall room ventilation, creating only very little turbulence in the occupied zone.
- Type SWF ceiling swirl diffusers have fixed blades.
- Air discharge is horizontal Omni directional.
- The supply air to room air temperature difference may range from -12 to +10 K.
- A damper blade (optional) simplifies volume flow rate balancing for commissioning.
- Pressure tap and cord-operated damper blade (optional) allow for volume flow rate balancing with the diffuser face in place.
- To give rooms an aesthetic, uniform look, Type SWF diffusers may also be used for extract air.

Plenum Box



1- Diffuser face

2- Central fixing screw

3- Plenum box

4- Cross bar

5- Suspension hole

6- Spigot optional

7- Lip seal

8- Damper blade for volume flow rate balancing

9- Pressure tap

10- Green cord for closing the damper blade

11- White cord for opining the damper blade

12- Measuring tube

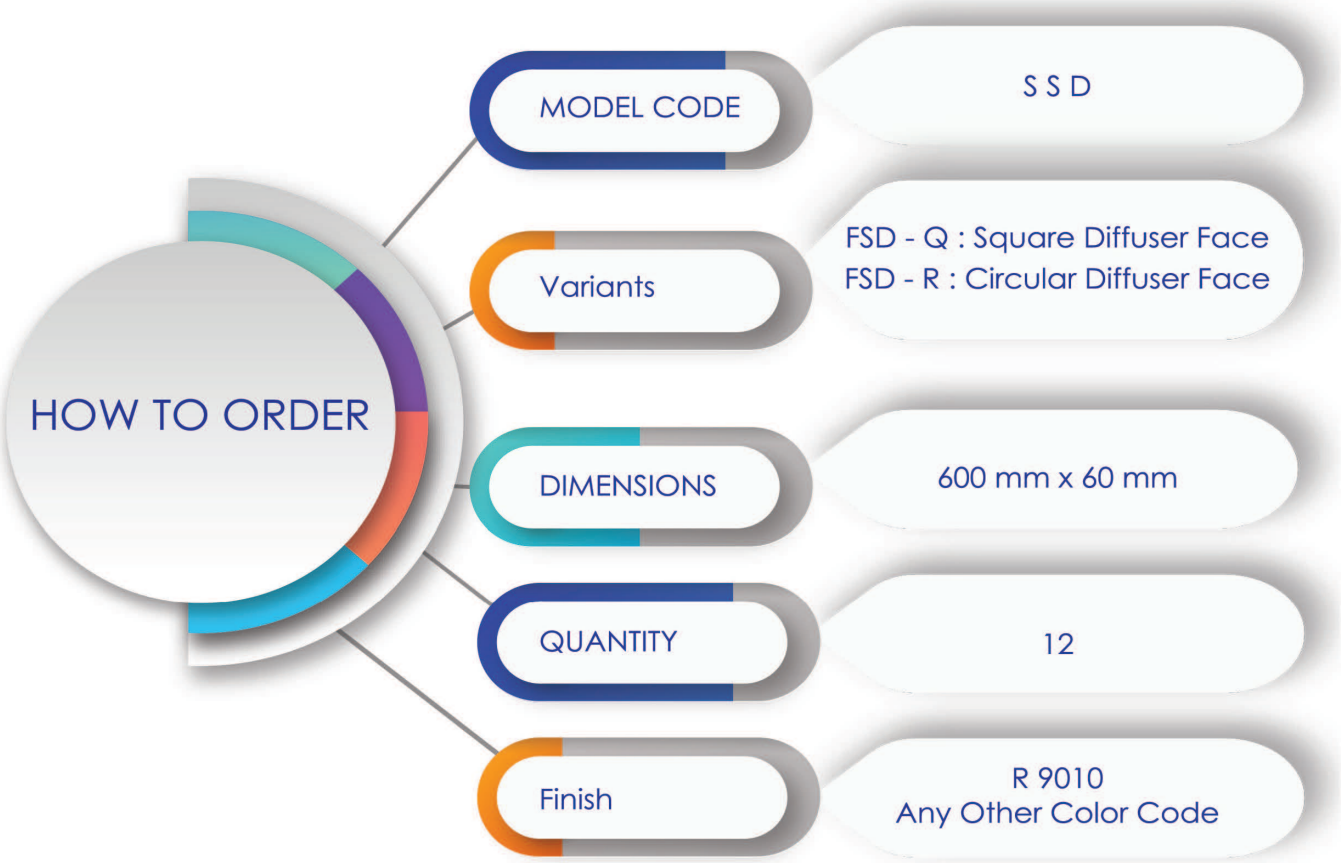
13- Text label indicating plenum box variant

Selection

		Neck Velocity	200	300	400	500	600	700	800	900	1000	1100	1200	1300
		velocity pressure	0.002	0.006	0.010	0.016	0.022	0.031	0.040	0.051	0.062	0.075	0.090	0.105
24×24 module	6"Dia	Airflow . cfm	34	59	79	98	118	138	157	177	197	216	236	256
		total pressure	0.004	0.012	0.022	0.034	0.049	0.067	0.087	0.106	0.126	0.155	0.188	0.219
		nc (noise criteria)	-	-	4	9	13	16	19	23	26	30	33	35
		throw	0-1-3	1-2-4	2-3-5	2-3-6	3-4-6	3-5-7	3-5-7	4-5-8	4-6-8	5-69	5-6-9	5-7-9
	8"Dia	Airflow . cfm	70	105	139	174	209	245	279	314	349	384	419	454
		total pressure	0.008	0.017	0.030	0.047	0.067	0.094	0.117	0.145	0.189	0.218	0.259	0.304
		nc (noise criteria)	-	6	12	17	21	27	31	35	38	40	41	43
		throw	123	1-2-4	2-3-5	2-3-7	3-4-7	3-5-8	4-5-9	4-6-9	5-7-10	5-7-10	5-7-11	6-8-11
	10"Dia	Airflow . cfm	109	164	218	273	328	382	436	491	546	601	655	
		total pressure	0.011	0.024	0.043	0.068	0.114	0.152	0.191	0.240	0.297	0.359	0.427	
		nc (noise criteria)	-	10	16	21	28	34	36	40	42	44	46	
		throw	1-2-4	2-3-6	3-4-8	4-5-9	4-6-10	5-7-11	6-8-12	6-9-13	8-9-13	8-10-14	8-10-14	
	12"Dia	Airflow . cfm	157	239	319	393	471	550	628	707	785	864		
		total pressure	0.023	0.053	0.094	0.138	0.199	0.271	0.354	0.448	0.554	0.670		
		nc (noise criteria)	9	18	24	30	38	41	44	47	49	51		
		throw	2-3-5	3-4-8	4-5-10	5-6-11	4-8-13	6-9-14	7-10-15	8-11-15	9-12-16	9-12-17		

- Data obtained from tests conducted in accordance with ANSI/ASHRAE standard 70-2006. Actual performance with flexible duct inlet, may vary in the field.
- Throw values given are for terminal velocities of 150, 100 and 50 fpm and for isothermal conditions.
- Each NC value represents the noise criteria curve that will not be exceeded by the sound pressure in any of the octave bands, 2 through 7, with a room absorption of 10 dB, re 10-12 watts.
- Dash (-) in space denotes an NC Value of less than 10.
- All pressures are given in inches of water.
- To obtain static pressure, subtract the velocity pressure from the total pressure.

How To Order


HOW TO ORDER
MODEL CODE
S S D
Variants
FSD - Q : Square Diffuser Face
FSD - R : Circular Diffuser Face
DIMENSIONS
600 mm x 60 mm
QUANTITY
12
Finish
R 9010
Any Other Color Code

OUR PROJECTS


WE
ARE
ALWAYS
HAPPY
TO SERVE
YOU