

Technical Data Sheet



AirQon Synergies

S2 Fixed blades swirl diffuser

Product description

- It comes with fixed spiral blades that produce rotational, axial, and radial air movement, which produces a powerful horizontal swirl allowing the supply air to mix with ambient air and decrease the space temperature.
- It could be also be used for return air as it offers minimum pressure drop across the grille.
- Swirl diffuser is created with aluminum sheet/GI sheet/Stainless Steel Sheet with stamped blades.
- Both frame and blades are extruded aluminum sheet/GI sheet/Stainless Steel Sheet and are coated with polyester powder with multiple color finish (as demanded). (except Stainless steel)
- Highest quality polyester powder is used which has increase the quality.



Applications

- Office buildings and other facilities
- Retail stores and shopping centers
- Hotels, Hospitals and healthcare facilities
- Schools and universities
- Industrial and manufacturing facilities
- Data centers and server rooms.
- Reception areas
- Fitness suits

Installation

The diffuser is securely attached to the plenum box or adapter using a single screw in the center of the panel or screws located at the corners of the diffuser.

Available size

Model	Size (mm)			CFM range	Effective area (m ²)
	W x H	D _o	D _i		
ARQN-18	600 x 600	530	140	180-800	0.062
	595 x 595				

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Diffuser adapters

Square to round neck adaptors

Applications

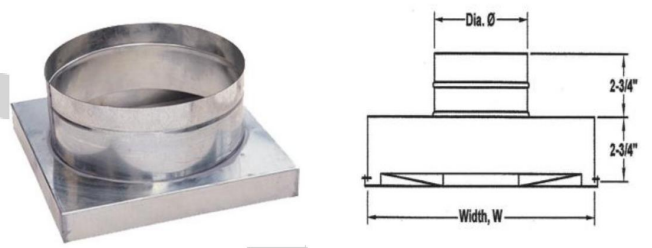
Square to round adaptor is installed at the field and it enables the utilization of round rigid duct.

Features and installation

Square to round neck are best suited with flexible or round rigid connections. They can be used with any type of diffuser and are designed to provide an affordable transition from square to round neck. Construction is of galvanized steel, and coated with powder and finish is of black color.

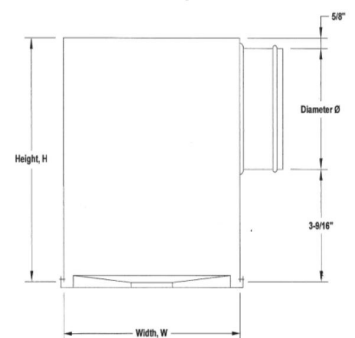
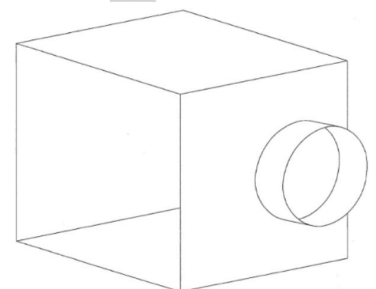
Available sizes

Sizes (mm)	Diameter (mm)	Width (mm)
600 x 600	150	595 x 595
Or	200	Or
595 x 595	250	590 x 590
	300	



Plenum Box Available size

Sizes (inches)	Dia (inches)	Width (inches)	Height (inches)
24 x 24	6	23.80	9
	8	23.80	11
	10	23.80	13
	12	23.80	15



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Adapter Performance data

Module Size (mm)	Adapter Neck size	Neck velocity, fpm	200	300	400	500	600	700	800	900	1000	1100	1200	1300	
			Vel/(in of wg)	.002	.006	0.01	0.016	0.022	0.031	0.04	0.051	0.062	0.075	0.09	0.105
009 x 600	150 mm	Airflow, cfm	38	57	76	95	114	133	152	171	190	209	228	247	
		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	-	-	4	9	13	16	19	23	26	30	33	35	
		Throw	1-3	2-4	3-5	3-6	4-6	5-7	5-7	5-8	6-8	6-9	6-9	7-9	
	200 mm	Airflow, cfm	68	101	135	169	203	237	271	304	338	372	406	440	
		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	-	6	12	17	21	27	31	35	38	40	41	43	
		Throw	2-3	2-4	3-5	3-7	4-7	5-8	5-9	6-9	7-10	7-10	7-11	8-11	
		250 mm	Airflow, cfm	106	159	211	264	317	370	423	476	528	581	634	-
			Total Pressure	0.011	0.024	0.43	0.068	0.144	0.152	0.191	0.240	0.297	0.359	0.427	-
595 x 595	300 mm	NC	-	10	16	21	28	34	36	40	42	44	46	-	
		Throw	2-4	3-6	4-8	5-9	6-10	7-11	8-12	9-13	9-13	10-14	10-14	-	
		Airflow, cfm	152	228	304	380	457	533	609	685	761	837	-	-	
		Total Pressure	0.023	0.053	0.094	0.138	0.199	0.271	0.354	0.448	0.554	0.670	-	-	
	300 mm	NC	9	18	24	30	38	41	44	47	49	51	-	-	
		Throw	3-5	4-8	5-10	6-11	8-13	9-14	10-15	11-15	12-16	12-17	-	-	