

# شركة مصنع عالم الناصريه المحدودة AL NASSERIAH WORLD FACTORY COMPANY LTD

## **SWIRL DIFFUSERS**







## الاً صرية AL NASSERIAH

## **SWIRL DIFFUSER**

#### **ANA Swirl Diffuser:**

Is designed for areas where rapid mixing of supply air is required in rooms of ceiling height between 2.6m and 4m and these diffusers produce a horizontal radial air pattern with high induction effect which making them ideally suited for applications with high heating and cooling differentials.







#### **ANA Swirl Diffuser Construction**

#### Frame:

Constructed from Aluminum Sheet alloy 6063 with a thickness of (1.2 mm).

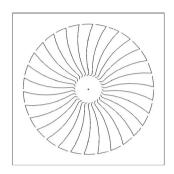
#### Finish :

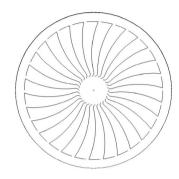
Electrostatic powder coating is used for Swirl Diffusers with standard white color for the Frame **(RAL 9016)** and other colors are available upon request.



#### **ANA Fixed Radial Pattern Swirl Diffuser**

Model: NSWR - X

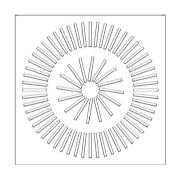


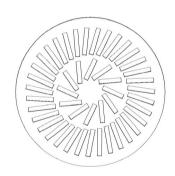


- Constructed from High Quality Aluminium sheet alloy 6063 with a thickness of 1.2mm
- Supply or Return air , the unique curved blade offers excellent performance at low to medium Air volumes.
- 360° Radial Air Diffusion for equal distribution of Air in all directions.
- No.of slots will vary based on the sizes.
- Other patterns are also available and can be made upon the request from customer.

#### **ANA Fixed Slot Pattern Swirl Diffuser**

Model: NSWS - X





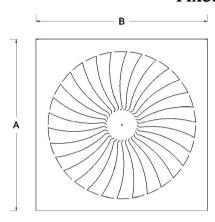
- Constructed from High Quality Aluminium sheet alloy 6063 with a thickness of 1.2mm
- Supply or Return air for areas where rapid mixing of supply air required in rooms of ceiling height between 2.6m and 4m
- Other patterns are also available and can be made upon the request from customer.

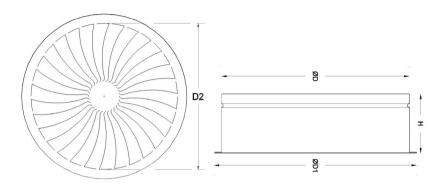
\*X - S (Square) or C (Circular)



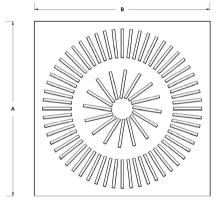
## **ANA Swirl Diffuser Dimensions:**

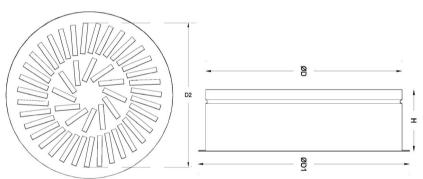
## Fixed Radial Pattern Swirl Diffuser





## **Fixed Slot Pattern Swirl Diffuser**





#### Dimensions (mm)

SIZE	No.of Slots	Ax B	ØD	ØD1	ØD2	Н
300	8	295 x 295	295	345	290	100
400	16	395 x 395	395	345	390	100
500	16 / 24	495 x 495	495	545	490	100
600	16/24/40/48/72	595 x 595	595	645	590	100
625	16/24/40/48	620 x 620	620	670	615	100



## **ANA Swirl Diffuser Performance Data - NSWS-S & NSWS-C**

NSWS-S / NSWS-C			Supply						
				400-16		600-48			
CFM m <sup>3</sup> /h			500-16	500-24	600-40				
		300-8	600-16	600-24	625-40				
			625-16	600-72	600-72				
		Throw (m)	1.4	1.2					
106 125	Pressure Drop (Pa)	21	17						
	NC	26	22						
		Throw (m)	1.6	1.4	1.0				
127	150	Pressure Drop (Pa)	30	24	7				
		NC	31	26	-				
		Throw (m)	1.8	1.6	1.1				
148	173	Pressure Drop (Pa)	41	30	9				
	NC	36	31	<20					
		Throw (m)	2.2	1.9	1.3				
170 200	Pressure Drop (Pa)	54	40	11					
		NC	40	35	21				
212 250	Throw (m)		2.3	1.5	1.0				
	Pressure Drop (Pa)		62	17	6				
	NC		40	27	<20				
		Throw (m)			1.8	1.5			
265 310	Pressure Drop (Pa)			26	11				
	NC			34	22				
318 372	Throw (m)			2.1	1.6				
	Pressure Drop (Pa)			38	19				
		NC			38	27			
	Throw (m)				2.1				
424	495	Pressure Drop (Pa)				24			
	NC				45				
567 663	Throw (m)				2.5				
	Pressure Drop (Pa)				56				
	NC				41				
636 744	Throw (m)				2.8				
	Pressure Drop (Pa)				63				
	NC				38				
		Throw (m)				3			
742	868	Pressure Drop (Pa)				65			
		NC				35			



### ANA Swirl Diffuser Performance Data - NSWR-S & NSWR-C

NSWR-S / NSWR-C	600 x 600 mm / ø600							
CFM	160	212	265	318	371	424	477	530
m³/h	188	250	310	372	435	495	558	620
Throw (m)	0.8	1.0	1.2	1.6	1.9	2.1	2.6	3.3
Pressure drop (Pa)	1	-	22	24	26	29	36	43
NC	<20	<20	<20	<20	20	24	32	56

#### Data Key:

Air Flow: (m³/h),
Throw: Meter (m),

• Pressure drop : Pascal (pa)

CFM: Cubic Feet per Minute (CFM)NC: Noise Criteria at 10db attenuation.

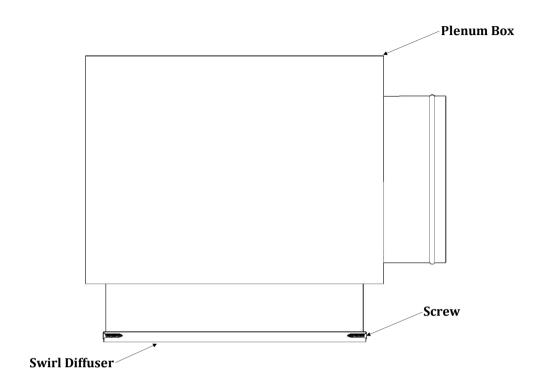
• A<sub>f</sub>: Area Factor (Square Feet).

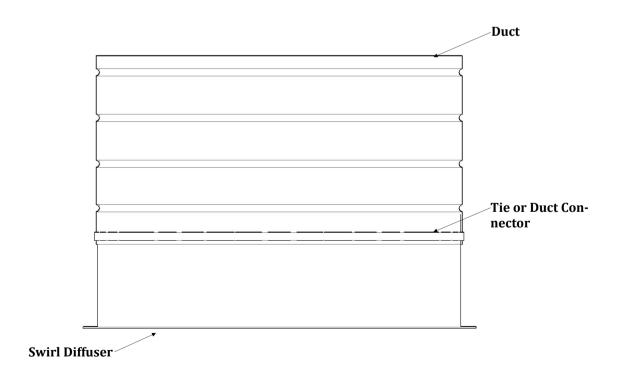
#### **Selection Criteria:**

Throw data is based on a terminal velocity of  $0.5 \, \text{m/s}$  and  $10^{\circ} \text{C}$  cooling differential. Noise levels are based on 8dB room absorption factor. Pressure drop data is shown in terms of static pressure loss (Pa) based on a diffuser fitted with a side entry plenum box.



## **ANA Swirl Diffuser Installation:**







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