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



CEILING DIFFUSER

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

QUICK GUIDE



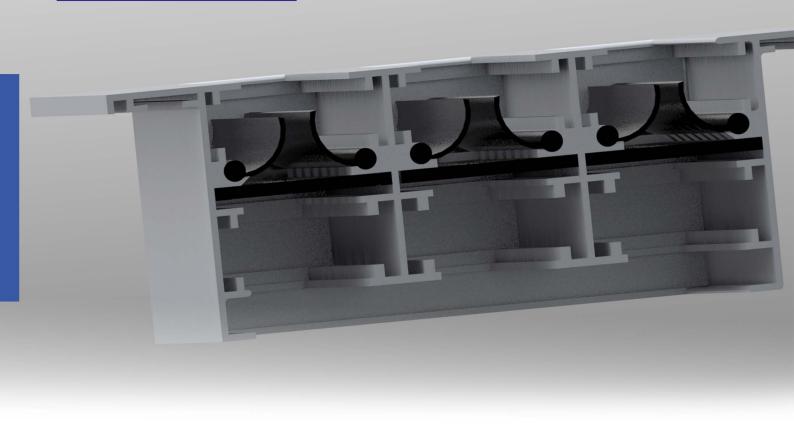


LINEAR CEILING DIFFUSER

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



Construction



1- Frame

Made from High quality extruded aluminum profile with 30 mm flange width as standard and nonstandard widths are available as option.

2- Blade

Made from High quality extruded aluminum profile with 20 mm flange width as standard and nonstandard widths are available as option.

3- Damper

Made from aluminum sheets coated matte black.

4- Number available (of slots)

1, 2, 3, 4, 5, 6, 7, 8.



Description



- The frame and blades are of high quality extruded aluminum profiled construction with Powder coated color finish
- Slot diffuser fabricated of high quality aluminum extrusion and is satin anodized; the deflector and damper are coated matte black to accent the blotted together for a blemish-free application
- Air flow rate control is provided by deflection blades and volume control damper (hit and miss damper) adjustable from the diffuser face
- Linear slot diffuser can be supplied with plenum box, which is manufactured from galvanized steel sheet as option
- In the supply mode the discharge can either be set horizontal or vertical directions by adjustment of the air deflection blades. For stable horizontal discharge continuous flat ceiling is normally required
- Curved linear slot diffusers are available from 3 m length with a minimum radius of curvature of 1m maximum length of linear slot diffuser in single piece 5.8 m
- Powder coated color finish per RAL color codes as standard and flexibility of finish



Supply Air Linear Slot Diffuser

Construction:

Frame & Blades: High quality extruded aluminum profiles.

Frame width: 30 mm standard. 20 mm also available

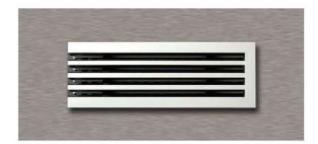
Damper: Hit and miss damper.

Slot width: 20 mm as standard. 16 mm, 25 mm and non standard sizes available as option.

Number of slots available: 1, 2, 3, 4, 5, 6, 7, 8. Length: Up to 5.8 mt available in a single piece. Optional accessories: plenum box either un-lined, internally insulated or externally insulated.

Description:

- Frame and deflection blades are made of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Air distribution can be changed vertically or horizontally by means of deflection blades without changing the air flow rate. These blades can be fully adjusted from face opening.
- Air flow rate can be adjusted by fixing hit and miss damper at the rear side of the diffuser. Damper blades are adjusted from the face opening.
- Dampers are designed in a unique way that it can be used as an equalizing grid.
- Positive alignment of adjacent sections can be made by using alignment strips.
- Suitable for installation for ceiling and sills.
- Foam gasket sealed around the back of the frame to avoid air leakage.





Standard finishes:

- Natural anodized aluminum finish.
- Powder coated color finish as per RAL color code.
- Flexibility of finish available.



Return Air Linear Slot Diffuser

Construction:

Frame & Blades: High quality extruded aluminum profiles.

Frame width: 30 mm standard. 20 mm also available.

Damper: Hit and miss damper.

Slot width: 20 mm as standard. 16 mm, 25 mm and non standard sizes available as option.

Number of slots available: 1, 2, 3, 4, 5, 6, 7, 8. Length: Up to 5.8 mt available in a single piece. Optional accessories: Plenum box either un-lined, internally insulated or externally insulated.

Description:

- Frame and deflection blades are made of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Positive alignment of adjacent sections can be made by using alignment strips that are provided with each diffuser.
- Structure is manufactured by mechanical assembly to ensure rigidity and straight line appearance.
- Available without hit and miss damper as standard. Damper will be provided as option.
- Suitable for installation into ceiling and sills.

Standard finishes:

- Natural anodized aluminum finish.
- Powder coated color finish as per RAL color code.
- Flexibility of finish available.







Curved Supply Air Linear Slot Diffuser

Construction:

Frame & Blades: High quality extruded aluminum profiles.

Frame width: 30 mm standard. 20mm also available.

Damper: Hit and miss damper.

Slot width: 20 mm as standard. 16 mm, 25 mm and non standard sizes available as option.

Number of slots available: 1, 2, 3, 4, 5, 6, 7, 8. Length: Up to 3 mt available in a single piece.

Description:

- Frame and deflection blades are made of high quality extruded aluminum profiled construction with the advantages of corrosion resistance and rigidity.
- Hit and miss damper will be fixed rigidly at the rear side of the diffuser as option.
- Positive alignment of adjacent sections can be made by using alignment strips.
- Foam gasket is sealed around the back of the frame as option to avoid air leakage.
- Suitable for installation in ceiling and sills.
- Supply and return air curved linear slot diffusers are available up to a length of 3 meters with a minimum radius of curvature of 1 meter.
- Standard application on the ceiling.

Standard finishes:

- Natural anodized aluminum finish.
- Powder coated color finish as per RAL color code.
- Flexibility of finish available.







Curved Slot Diffuser





- Supply and return air Curved slot diffusers are available from 3 m length with a minimum radius of curvature 1 m.
- Curved slot diffusers can be supplied with damper.



Mitered Corners



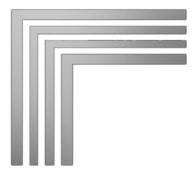
■ Vertical inside mitered corners with 90° as standard and nonstandard angles are available.



 Vertical outside mitered corners with 90° as standard and nonstandard angles are available.



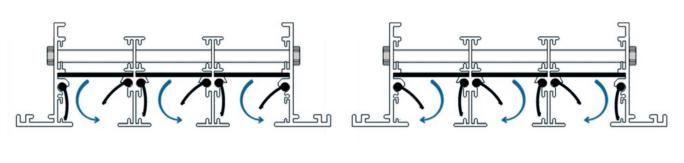
■ Nonstandard angle horizontal mitered corners (angle greater than 90° and less than 180°)



 Standard 90° horizontal mitered corners

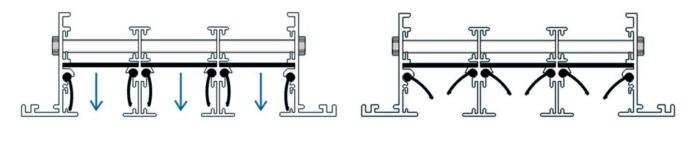


Air Distribution



■ Right horizontal distribution

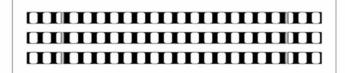
Left horizontal distribution

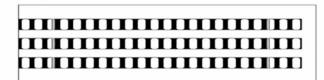


Vertical distribution

Adjust the air flow rate

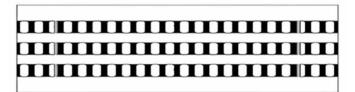
End Cap





With both side end cap

With one side end cap

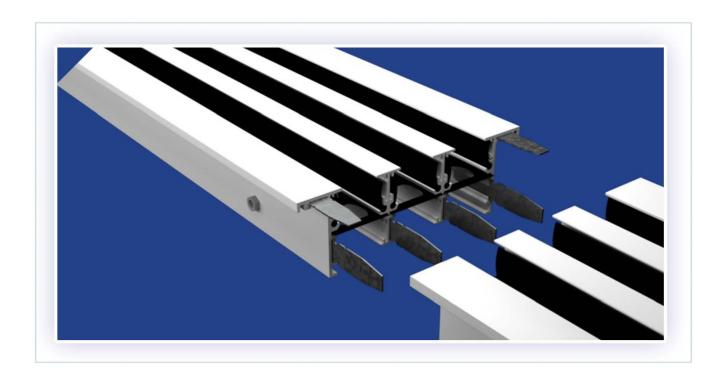


With open ends

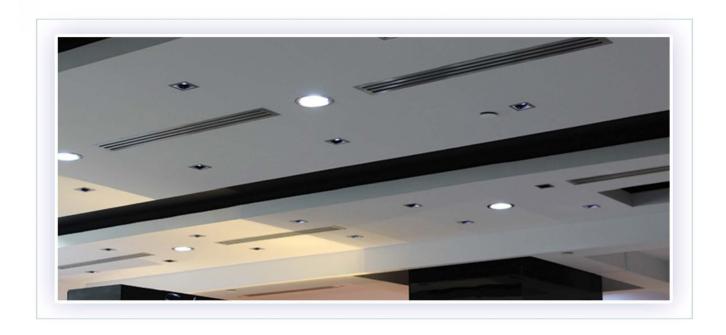




Slot Connection



Alignment strips



Supply Linear Slot Diffuser

Number of slots	Air flow rate		Face Velocity	Throw in meters	Ps in mm	Noise
	Cfm	m /sec	m/sec		но	Criteria (NC
1	50	.024	2.61	3.6 - 2.1 - 0.6	.65	<15
	75	.035	3.8	4.9 - 3.0 - 1.8	1.44	18
	100	.047	5.11	6.1 - 4.3 - 2.7	2.55	30
	125	.059	6.41	7.0 - 4.9 - 3.7	3.97	35
	150	.071	7.72	7.6 - 5.8 - 4.6	4.37	38
	175	.083	9.02	8.5 - 6.7 - 5.2	6.12	41
	100	.047	2.61	4.3 - 2.4 - 0.6	.97	<15
2	125	.059	3.28	5.2 - 3.0 - 1.5	1.47	20
	150	.071	3.94	6.1 - 3.9 - 2.1	2.12	28
	175	.083	4.61	6.7 - 4.6 - 3.0	2.87	30
	200	.094	5.22	7.0 - 5.2 - 4.3	3.73	33
	250	.118	6.55	7.9 - 6.1 - 4.9	5.78	39
	125	.059	2.11	4.2 - 2.2 - 0.7	.86	<15
	150	.071	2.53	4.9 - 2.9 - 1.4	1.21	18
3	200	.094	3.36	5.5 - 3.7 - 2.4	2.17	25
3	225	.106	3.78	6.5 - 4.4 - 3.3	2.73	29
	250	.118	4.21	7.6 - 5.3 - 4.0	3.34	34
	300	.142	5.07	8.6 - 6.2 - 4.7	4.37	37
4	150	.071	1.91	4.6 - 2.7 - 1.1	.72	<15
	200	.094	2.53	5.4 - 3.6 - 2.0	1.39	21
	250	.118	3.17	6.1 - 4.5 - 3.1	1.98	25
	300	.142	3.82	6.7 - 5.2 - 3.9	2.85	30
	350	.165	4.43	7.9 - 5.6 - 4.5	3.84	35
	400	.189	5.08	8.8 - 6.7 - 5.2	4.51	38

- Data based on one meter length of the diffuser with damper fully opened.
- Face velocity is measured in m/sec.
- \blacksquare Ps: static pressure loss is in mm of H_2O . area factor in square meters.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- NC based on a room attenuation of 10 db.



Supply Linear Slot Diffuser

Number of slots	Air flow rate		Face Velocity	Throw in meters	Noise	
	Cfm	m /sec	m/sec		Criteria (NC)	
	250	.118	2.54	5.8 - 4.3 - 2.7	22	
	300	.142	3.05	6.4 - 4.9 - 3.6	24	
5	350	.165	3.55	6.8 - 5.3 - 3.7	29	
	400	.189	4.06	7.7 - 5.5 - 4.1	34	
	450	.213	4.58	8.5 - 5.9 - 4.7	35	
	500	.236	5.07	9.1 - 6.3 - 5.2	38	
	300	.142	2.53	6.1 - 4.3 - 2.9	22	
	350	.165	2.95	6.6 - 5.2 - 3.9	24	
6	400	.189	3.37	7.3 - 5.5 - 4.3	28	
	450	.213	3.8	7.6 - 5.8 - 4.6	31	
	500	.236	4.21	8.2 - 6.1 - 4.8	35	
	600	.283	5.05	9.2 - 6.7 - 5.3	40	
	350	.165	2.54	6.1 - 4.3 - 2.9	22	
	400	.189	2.91	6.7 - 5.1 - 3.8	25	
7	450	.213	3.28	7.0 - 5.3 - 4.0	28	
	500	.236	3.63	7.4 - 6.2 - 4.7	30	
	600	.283	4.35	8.6 - 6.7 - 5.0	36	
	700	.331	5.09	9.4 - 7.2 - 5.6	40	
	400	.189	2.49	6.1 - 4.6 - 3.7	22	
8	450	.213	2.8	6.7 - 5.1 - 3.8	25	
	500	.236	3.1	7.1 - 5.6 - 4.3	29	
	600	.283	3.72	7.6 - 6.4 - 4.7	31	
	700	.331	4.35	8.8 - 7.2 - 5.4	37	
	800	.378	4.97	9.7 - 7.8 - 5.9	40	

- Data based on one meter length of the diffuser with damper fully opened.
- Face velocity is measured in m/sec.
- \blacksquare Ps: static pressure loss is in mm of H_2O . area factor in square meters.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- NC based on a room attenuation of 10 db.

Return Linear Slot Diffuser

o. of slots	s						
1	CFM	100	150	200	250	300	350
	M³/sec	.047	.071	.094	.118	.142	.165
	Ps	.61	1.37	2.41	3.81	5.46	7.37
	NC	<15	19	28	36	42	48
	CFM	250	300	350	400	450	500
	M³/sec	.118	.142	.165	.189	.212	.236
2	Ps	1.02	1.47	2.03	2.62	3.3	4.06
	NC	17	22	27	32	36	40
	CFM	350	400	450	500	600	700
3	M³/sec	.165	.189	.212	.236	.283	.331
3	Ps	1.04	1.35	1.68	2.08	2.97	4.01
	NC	17	22	25	30	34	40
	CFM	400	500	600	700	800	900
	M³/sec	.189	.236	.283	.331	.378	.425
4	Ps	.76	1.19	1.73	2.36	3.25	4.06
	NC	15	21	26	30	35	40
	CFM	500	600	700	800	1000	1200
5	M³/sec	.236	.283	.331	.378	.472	.567
5	Ps	.76	1.12	1.52	1.96	3.05	4.37
	NC	15	22	27	30	35	42
	CFM	600	700	800	1000	1200	1400
6	M³/sec	.283	.331	.378	.472	.567	.66
0	Ps	.83	1.08	1.78	2.18	3.53	4.75
	NC	17	24	29	31	37	43
	CFM	700	800	1000	1200	1400	1600
7	M³/sec	.331	.378	.472	.567	.66	.76
	Ps	.93	1.13	1.83	2.36	3.66	4.75
	NC	18	25	30	33	38	43
8	CFM	800	900	1100	1300	1500	1700
	M³/sec	.378	.425	.52	.61	.71	.8
	Ps	1.02	1.13	96	2.45	3.87	4.93
	NC	18	25	32	35	40	45

- Data based on one meter length of the diffuser with damper fully opened.
- Face velocity is measured in m/sec.
- \blacksquare Ps: static pressure loss is in mm of H_2O . area factor in square meters.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- NC based on a room attenuation of 10 db.



Plenum Box

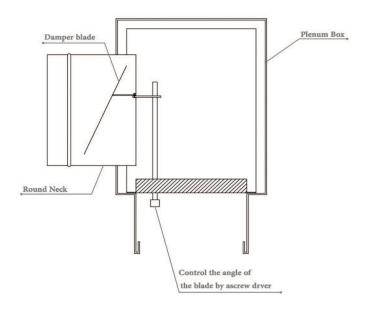


- Plenum box manufactured from galvanized steel 22 or 20 gauges as standard and non standard gauges are available with flexibility of manufactured.
- Plenum box supplied with round neck and internal insulation as standard.
- Round neck manufactured from galvanized steel 22 or 20 gauges with standard length 100 mm and variable diameter.
- Round neck may be supplied with round volume control damper as option.

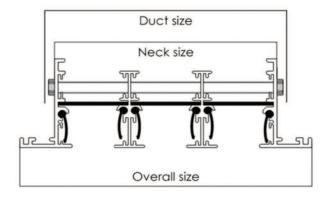


Round Neck (Volume Damper)

■ Round Neck may be supplied with round volume control damper which is accessible from the face of slot diffuser it self by screw driver without access door.

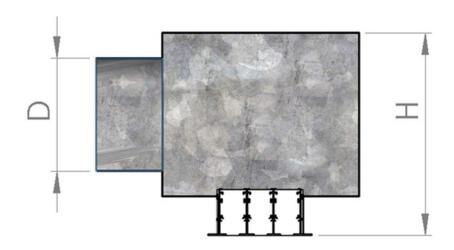


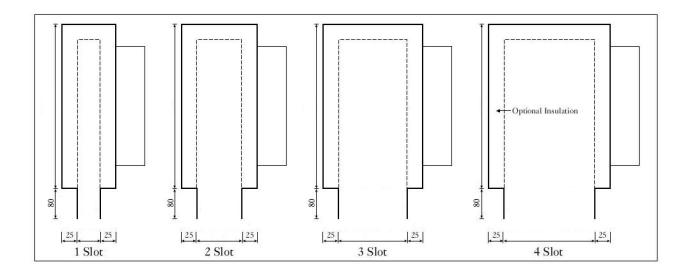
3/4" of Slot								
No of Slot	1	2	3	4	5	6	7	8
Duct size (mm)	50	88	126	164	202	240	278	376
Neck size (mm)	38	76	114	152	190	228	266	304
Overall size (mm)	80	118	156	194	232	270	308	346
CFM/FT	10-100	20-125	30-150	40-200	50-250	60-300	70-350	80-400
I" of Slot								
No of Slot	1	2	3	4	5	6	7	8
Duct size (mm)	55	98		184	227	270	313	356
Neck size (mm)	43	86	129	172	215	258	301	344
Overall size (mm)	85	128	171	214	257	300	343	386
CFM/FT ` ´	10-100	20-125	30-150	40-200	50-250	60-300	70-350	80-400
S						- VENTANTA TOTAL	W/15 / 15 / 15 / 15 / 15 / 15 / 15 / 15	





Plenum Box Dimensions





	length (feet)							
No of slot	4			6	8			
	D"	H"	D"	H"	D"	H"		
1	5	10.55	6	11.55	8	13.55		
2	6	11.55	8	13.55	10	15.55		
3	8	13.55	10	15.55	10	15.55		
4	10	15.55	10	15.55	12	17.55		
5	10	15.55	12	17.55	16	21.55		
6	12	17.55	16	21.55	16	21.55		
7	12	17.55	16	21.55	16	21.55		
8	14	19.55	16	21.55	18	23.55		



How To Order

