WINNER

Products Catalogue

Winner Central Air Conditioning Equipments Co. L.L.C.
P.O. Box: 7265, Umm Al Quwain-UAE, Tel: 06 7667063, 06-7667064 Fax:06 7667065
Email: winnerac@eim.ae

ABOUT US

Winner central air conditioning equipments co L.L.C since 2006 has operated in the Middle East. Over these last years it has engaged in the manufacturing of quality air outlet products for the air conditioning industry. Our progressive growth is attributed to the hands-on approach by the top management. We have under taken and successfully executed projects for housing schemes, shopping malls, hotels, hospitals, mosque, office complexes etc...

Winner central air conditioning equipments co L.L.C is about commitment to excellence, building relationship, expanding horizon, evaluating standards, redefining quality and also devoted to proving the highest level of customer service. It is our customer care professionals and product application engineers that continue to make Winner central air conditioning equipments co L.L.C the top choice for engineers, architects and contractors in the building construction process in the middle East.

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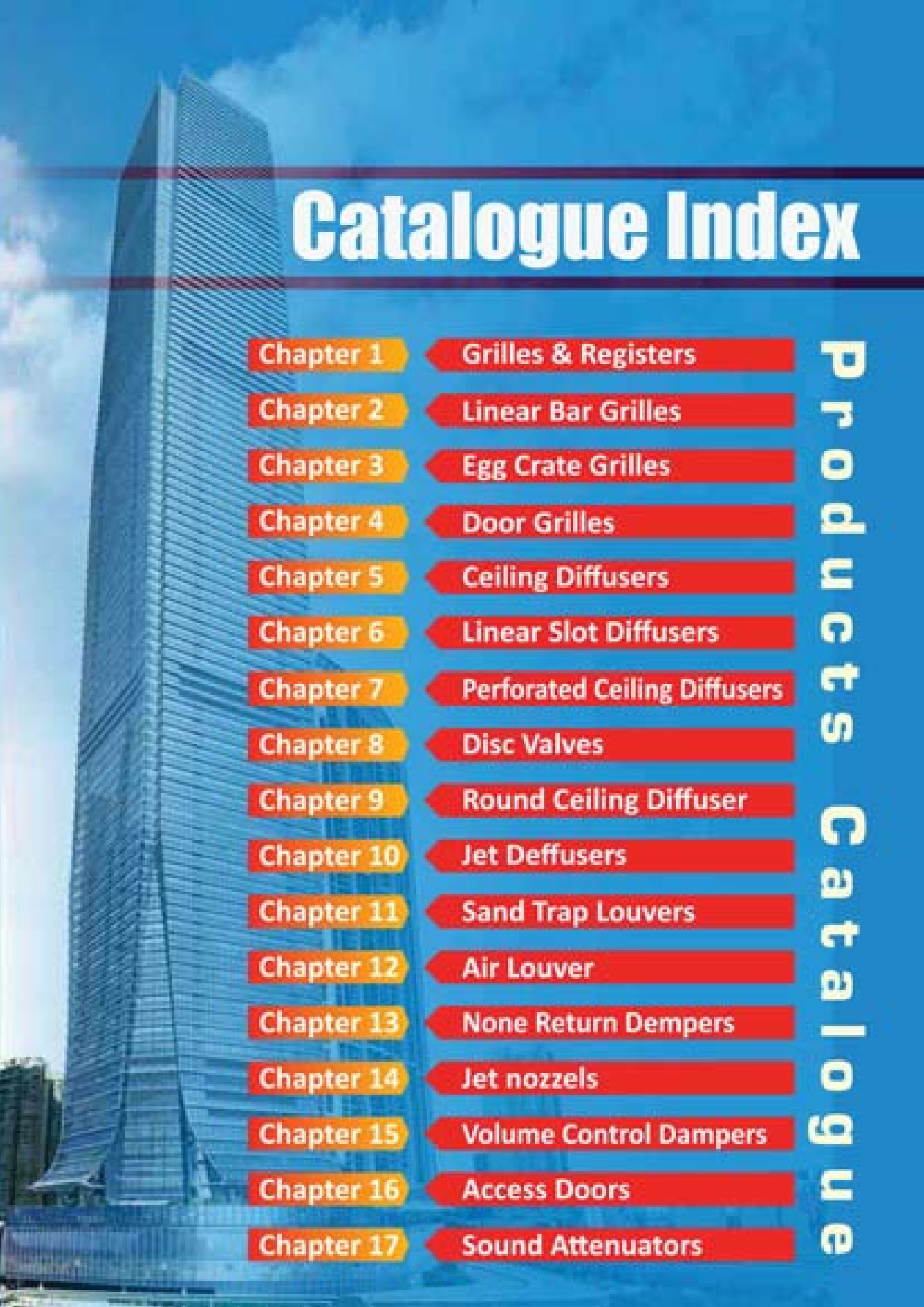


Catalogue Index

Products Catalogue

Chapter 1

GRILLES & REGISTERS

General Description:

The winner central air conditioning double & single deflection grilles are purpose designed for first- class performance in supply or return air system.

- The front set of blade cane be supplied in either a horizontal or vertical orientation, on double deflection grilles the rear blades are fixed in the opposite orientation to the front set.
- Special grille types include a hinged filter assembly and curved grille suitable for circular duct installation.
- Accessories include an opposed blade damper, finished in matt RAL 9005 black color.
- As standard the grille is supplied in either off white RAL 9010 or white RAL 9016 polyester powder paint.
- Alterative colors are available on special request, at extra cost.

Construction:

Frame: High quality extrude aluminum profile with 30 mm flange width as standard.20, 24mm flange vwidths are optional.

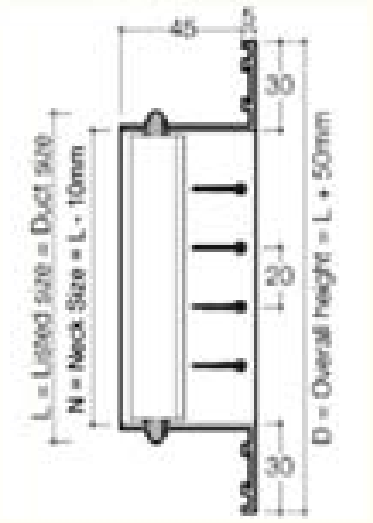
Blades: Aerofoil blade from aluminum profiles.

Blade Spacing: As standard all single or double deflection blade are set on a pitch of 20 mm and blades are manually adjusted. To ensure smooth operation and easy setting each blade is mounted in nylon bushes.

Fixing: Standard installation method is by front screw fixing or with concealed spring clips.

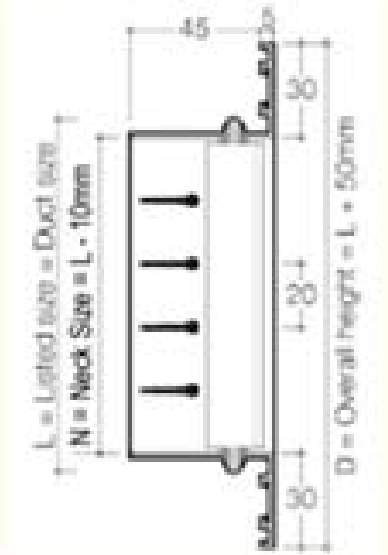
DOUBLE DEFLECTION REGISTER

Model: SH-WG



- Horizontal front face blade
- Vertical rear blades
- If the grill width more than 500mm, a million will be fixed at the center and for widths of one meter and above, the number of mullions will be two or more.

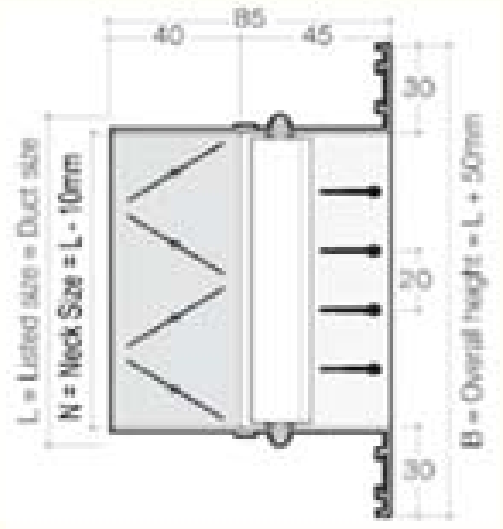
Model: SV-WG



- Vertical front face blade
- Horizontal rear blades
- If the grill width more than 500mm, a million will be fixed at the center and for widths of one meter and above, the number of mullions will be two or more.

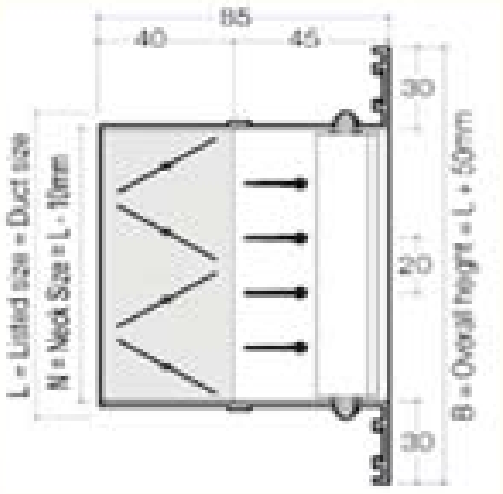
DOUBLE DEFLECTION REGISTER

Model: SHD-WG



- Horizontal front face blade with damper
- Vertical rear blades
- If the grill width more than 500mm, a million will be fixed at the center and for widths of one meter and above, the number of mullions will be two or more.

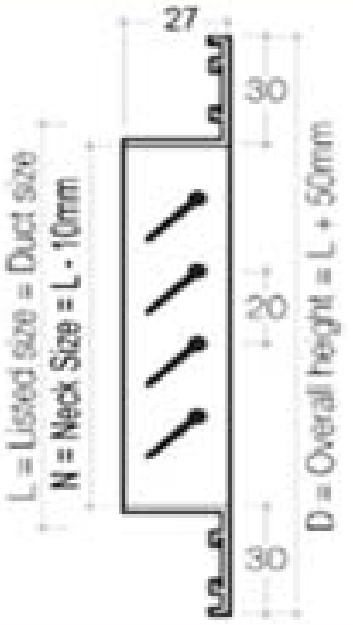
Model: SVD-WG



- Vertical front face blade with damper
- Horizontal rear blades
- If the grill width more than 500mm, a million will be fixed at the center and for widths of one meter and above, the number of mullions will be two or more

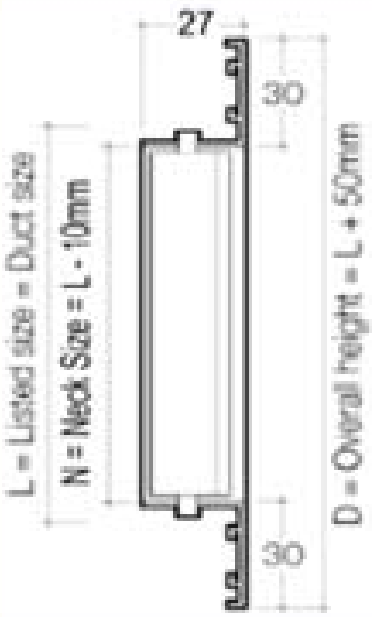
RETURN AIR GRILLE

Model: RH-WG



- Fixed Horizontal blades at 45° angle as standard
- Screw or concealed fixing option.
- If the grill width more than 500mm, a million will be fixed at the center and for widths of one meter and above, the number of mullions will be two or more

Model: RV-WG

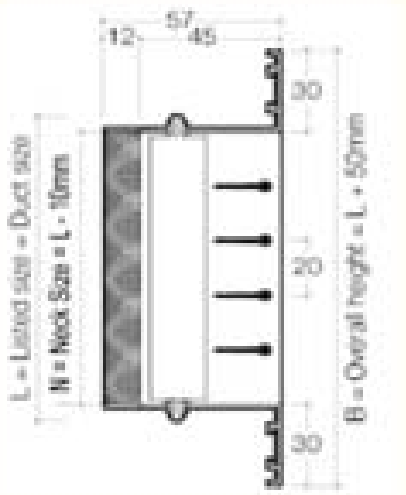


- Fixed vertical blades at 45° angle as standard
- Screw or concealed fixing option.

Note: Return Air Register or Return Air Grille available with opposed blade dampers.

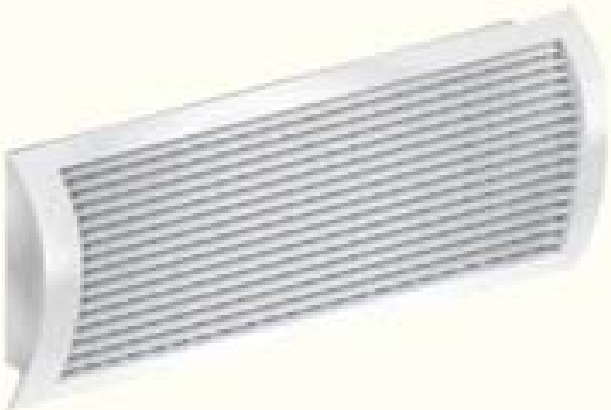
FRESH AIR GRILLE

Model: SH-F-WG



- Double frame of grille & filter
- Fixed front face blades
- Grille frame is hinged withfilter frame.
- Removable and washable aluminium media filter.

Model: SC-WG



- Single and Duble deflection blades
- Both horisontal and vertical front facing blades
- Normal opposed blade bapers are optanal.
- Fixing Screw or concealed spring clips

STANDARD SIZES & AIR FLOW DATA RATING WITH 0°& 45° DEFLECTION

CFM / M³/sec	Listed Size in mm x mm	200 x 100		250 x 100 200 x 125 150 x 150		200 x 150 250 x 125 300 x 100		250 x 150 300 x 125 400 x 100		300 x 150 350 x 125 450 x 100	
	Area factor Deflection	0.0191 0°	0.0093 45°	0.0199 0°	0.0102 45°	0.0214 0°	0.0113 45°	0.0246 0°	0.0142 45°	0.0269 0°	0.0169 45°
100 0.0472	Face vel Pi mm H₂O Throw in (M) N.C	2.47 0.43 4.2-5.4 15	5.08 1.45 2.7-4.8 19	2.37 0.35 3.9-5.5 <15	4.63 1.22 3.0-4.9 16	2.21 0.33 3.9-5.2 <15	4.18 1.04 3.0-4.9 <15	1.92 0.23 4.0-5.2 <15	3.52 0.89 2.7-4.6 <15		
150 0.0708	Face vel Pi mm H₂O Throw in (M) N.C	3.71 0.99 4.9-6.4 18	7.61 3.23 3.6-5.8 24	3.56 0.78 4.6-6.1 16	6.94 2.72 3.7-5.5 21	3.31 0.74 4.3-6.1 <15	6.27 2.31 3.7-5.2 16	2.87 0.53 4.3-6.1 <15	4.98 1.55 3.4-5.2 <15	2.63 0.46 4.0-5.8 <15	4.19 1.07 3.4-4.9 <15
200 0.0945	Face vel Pi mm H₂O Throw in (M) N.C	4.95 1.77 5.2-7.3 21	10.16 5.76 4.3-6.4 28	4.75 1.39 5.2-7.0 19	9.26 4.88 4.3-6.1 25	4.42 1.3 4.9-7.0 17	8.36 4.12 3.9-6.1 24	3.84 0.94 4.9-6.7 15	6.65 2.77 4.0-5.8 20	3.51 0.81 4.6-6.7 <15	5.59 1.88 4.0-5.8 15
250 0.1181	Face vel Pi mm H₂O Throw in (M) N.C	6.18 2.76 5.8-7.9 28	12.69 9.02 4.8-7.0 35	5.93 2.18 5.8-7.9 27	11.58 7.62 4.9-7.0 32	5.52 2.0 5.5-7.6 24	10.45 6.45 4.9-6.7 31	4.80 1.45 5.4-7.6 21	8.32 4.32 4.6-6.7 27	4.39 1.24 5.2-7.6 17	6.988 2.95 4.6-6.7 23
300 0.1417	Face vel Pi mm H₂O Throw in (M) N.C	7.42 3.96 5.8-8.2 34	15.24 13.21 5.2-7.3 40	7.12 3.15 5.8-8.2 31	13.89 10.92 5.2-7.3 38	6.62 2.9 5.8-8.2 28	12.54 9.27 5.2-7.3 36	5.76 2.1 5.8-8.2 26	9.98 6.22 5.2-7.3 33	5.27 1.8 5.8-8.2 23	8.38 4.24 5.2-7.3 30
350 0.1653	Face vel Pi mm H₂O Throw in (M) N.C	8.65 5.38 7.0-9.8 37	17.77 17.53 5.8-8.2 45	8.31 4.32 6.7-9.5 35	16.21 14.98 5.8-8.2 42	7.72 3.9 6.7-9.5 32	14.63 12.57 5.4-7.9 39	6.72 2.87 6.4-9.2 30	11.64 8.51 5.4-7.9 37	6.14 2.46 6.4-9.1 28	9.78 5.77 5.4-7.9 35
400 0.1889	Face vel Pi mm H₂O Throw in (M) N.C			9.49 5.61 7.6-10.4 38	18.52 19.56 6.7-9.1 45	8.80 5.13 7.3-10.4 36	16.72 16.51 6.4-8.8 42	7.68 3.76 7.0-10.1 34	13.30 11.05 6.1-8.5 40	7.022 3.2 6.7-9.8 32	11.18 7.52 6.1-8.5 38
450 0.2125	Face vel Pi mm H₂O Throw in (M) N.C							8.64 4.72 7.3-10.7 39	14.96 13.97 6.7-9.1 43	7.899 4.06 7.0-10.4 36	12.57 9.53 6.4-8.8 42
500 0.2362	Face vel Pi mm H₂O Throw in (M) N.C									8.78 5.00 7.3-10.9 40	13.97 11.74 6.7-7.4 45

- Face velocity is measured in m/sec.
- Total pressure loss in mm of H_2O & Area factor in squre meter.
- Throw[meters]is measured for a terminal velocities of o.5 & 0.25 m/sec.
- NC baced on a room attenuation of 10 dB.

STANDARD SIZES & AIR FLOW DATA RATING WITH 0°& 45° DEFLECTION

CFM / M³/sec	Listed Size in mm x mm	250 x 200 350 x 150 400 x 125 500 x 100		250 x 250 300 x 200 400 x 150 500 x 125 650 x 100		300 x 250 450 x 175 500 x 150 600 x 125 750 x 100		300 x 300 350 x 250 450 x 200 600 x 150		350 x 300 400 x 250 500 x 200 750 x 150	
	Area factor Deflection	0.029 0°	0.01178 45°	0.0324 0°	0.022 45°	0.039 0°	0.0256 45°	0.0469 0°	0.0369 45°	0.0528 0°	0.0422 45°
200 0.0945	Face vel Pt mm H_2O Throw in (M) N.C	3.38 0.64 4.5-6.7 <15	5.31 1.7 3.7-5.8 <15	2.91 0.36 4.5-6.7 <15	4.30 1.17 3.7-5.5 <15	2.42 0.23 4.6-6.7 <15	3.28 0.71 3.4-5.5 <15	2.0 0.15 4.6-6.7 <15	2.56 0.41 3.1-5.5 <15		
250 0.1181	Face vel Pt mm H_2O Throw in (M) N.C	4.22 0.99 5.2-7.6 15	6.63 2.64 4.6-6.7 21	3.65 0.58 5.2-7.6 <15	5.37 1.83 4.3-6.7 18	3.03 0.36 5.2-7.6 <15	4.1 1.12 4.3-6.4 <15	2.52 0.23 5.2-7.6 <15	3.201 0.61 3.9-6.4 <15	2.24 0.18 5.2-7.3 <15	2.79 0.41 3.6-6.0 <15
300 0.1417	Face vel Pt mm H_2O Throw in (M) N.C	5.06 1.42 5.8-8.2 20	7.96 3.81 5.2-7.3 27	4.37 0.84 5.8-8.2 17	6.44 2.62 5.2-7.3 22	3.63 0.51 5.8-8.2 <15	4.92 1.6 4.8-7.3 19	3.02 0.33 5.8-8.2 <15	3.84 0.89 4.8-7.3 <15	2.68 0.25 5.5-7.9 <15	3.36 0.58 4.9-7.0 <15
400 0.1889	Face vel Pt mm H_2O Throw in (M) N.C	6.75 2.51 6.7-9.8 29	10.6 6.73 6.4-8.9 36	5.83 1.47 6.7-9.8 24	8.59 4.67 6.1-8.5 27	4.84 0.91 6.7-9.8 19	6.56 2.87 5.8-8.5 21	4.03 0.61 6.7-9.5 <15	5.19 1.6 5.8-8.2 17	3.58 0.46 6.7-9.5 <15	4.47 1.07 5.5-8.2 <15
500 0.2362	Face vel Pt mm H_2O Throw in (M) N.C	8.44 3.91 7.3-10.9 35	13.27 10.54 6.7-9.2 42	7.29 2.29 7.3-10.9 30	10.74 7.24 6.7-9.1 32	6.06 1.45 7.6-11.0 26	8.2 4.47 6.4-9.1 28	5.036 0.94 7.9-11.3 18	6.4 2.46 6.4-9.1 24	4.47 0.71 7.6-11.3 15	5.59 1.65 6.2-9.1 19
600 0.2834	Face vel Pt mm H_2O Throw in (M) N.C			8.75 3.3 8.5-12.2 36	12.88 10.52 7.0-10.0 39	7.27 2.06 8.5-12.2 30	9.84 6.45 7.0-10.0 35	6.04 1.35 8.5-12.2 25	7.68 3.58 7.0-10.0 31	5.37 1.04 8.5-12.2 19	6.72 2.36 6.7-10.1 24
700 0.3307	Face vel Pt mm H_2O Throw in (M) N.C					8.48 2.82 9.1-13.1 36	11.48 8.76 7.6-10.9 42	7.05 1.83 9.1-13.1 32	8.96 4.83 7.6-11.0 37	6.26 1.40 9.1-13.1 25	7.84 3.25 7.6-10.9 31
800 0.3778	Face vel Pt mm H_2O Throw in (M) N.C							8.05 2.41 9.8-14.0 36	10.24 6.36 8.2-11.9 41	7.16 1.83 9.8-13.7 33	8.95 4.22 8.2-11.9 37
900 0.425	Face vel Pt mm H_2O Throw in (M) N.C							9.06 3.05 10.0-14.6 40	11.52 8.0 8.5-12.5 45	8.05 2.31 10.0-14.6 36	10.07 5.3 8.4-12.5 41

- Face velocity is measured in m/sec.
- Total pressure loss in mm of H_2O & Area factor in squre meter.
- Throw(meters)is measured for a terminal velocities of o.5 & 0.25 m/sec.
- NC baced on a room attenuation of 10 dB.

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STANDARD SIZES & AIR FLOW DATA RATING WITH 0°& 45° DEFLECTION

CFM / M³/sec	Listed Size in mm x mm	350 x 350 400 x 300 500 x 250 600 x 200 900 x 150		400 x 400 500 x 300 600 x 250 750 x 200		500 x 350 600 x 300 700 x 250 900 x 200 1200 x 150		450 x 450 500 x 400 800 x 250 1000 x 200	
	Area factor Deflection	0.0633 0°	0.0529 45°	0.0827 0°	0.072 45°	0.0962 0°	0.0853 45°	0.1069 0°	0.097 45°
500 0.2362	Face vel Pt mm H_2O Throw in (M) N.C	3.73 0.48 7.3-10.9 <15	4.47 1.02 5.8-9.1 16	2.86 0.28 6.7-10.7 <15	3.28 0.45 5.5-9.1 <15	2.46 0.20 9.5-10.4 <15	2.77 0.31 5.2-9.1 <15	2.21 0.15 6.1-10.1 <15	2.43 0.23 4.9-8.8 <15
600 0.2834	Face vel Pt mm H_2O Throw in (M) N.C	4.47 0.71 8.2-11.9 16	5.36 1.45 6.4-10.1 20	3.43 0.41 7.6-11.6 <15	3.94 0.63 6.4-10.1 18	2.95 0.31 7.3-11.3 <15	3.32 0.43 6.1-10.1 15	2.65 0.23 7.0-10.7 <15	2.92 0.31 6.1-9.8 <15
700 0.3307	Face vel Pt mm H_2O Throw in (M) N.C	5.22 0.96 8.8-12.8 22	6.25 1.98 7.3-10.9 26	4.0 0.56 8.5-12.5 19	4.59 0.86 7.0-11.0 23	3.44 0.41 8.5-12.2 16	3.88 0.56 7.0-10.9 20	3.09 0.31 8.2-11.9 15	3.4 0.43 6.7-10.7 19
800 0.3778	Face vel Pt mm H_2O Throw in (M) N.C	5.97 1.27 9.8-13.4 30	7.14 2.59 8.2-11.9 32	4.57 0.71 9.5-13.1 26	5.25 1.14 7.9-10.6 28	3.93 0.53 9.5-13.1 21	4.43 0.74 7.9-11.6 25	3.53 0.38 9.1-12.5 20	3.89 0.56 7.6-11.3 24
900 0.425	Face vel Pt mm H_2O Throw in (M) N.C	6.71 1.60 10.1-14.6 33	8.03 3.25 8.5-12.5 36	5.14 0.91 10.1-14.3 30	5.9 1.45 8.5-12.2 33	4.42 0.68 10.1-14.0 25	4.98 0.94 8.5-12.2 30	3.98 0.48 9.8-13.7 24	4.38 0.71 8.2-12.2 29
1000 0.472	Face vel Pt mm H_2O Throw in (M) N.C	7.44 1.98 10.7-15 37	8.92 4.01 9.1-13 40	5.69 1.11 10.4-15 34	6.55 1.78 9.1-13.1 36	4.92 0.84 10.4-14.6 30	5.55 1.17 9.1-13.1 33	4.45 0.61 10.1-14.3 29	4.86 0.86 9.2-13.1 32
1100 0.519	Face vel Pt mm H_2O Throw in (M) N.C	8.18 2.39 10.9-16 40	9.81 4.88 9.8-14 45	6.25 1.35 10.7-15 36	7.21 2.16 9.8-14 40	5.41 1.02 10.7-15.0 33	6.11 1.42 9.8-14 36	4.89 0.74 10.4-14.9 32	5.35 1.07 9.8-14 35
1200 0.567	Face vel Pt mm H_2O Throw in (M) N.C			6.83 1.60 11.3-16 38	7.87 2.54 10.4-15 43	5.91 1.22 11.3-15.9 36	6.67 1.68 10.4-14.9 40	5.35 1.0 11-15.2 35	5.84 1.24 10-14.8 39
1400 0.661	Face vel Pt mm H_2O Throw in (M) N.C			7.96 2.18 12.2-17 44	9.18 3.51 11-15.5 49	6.88 1.65 12.2-16.8 41	7.77 2.28 10.9-15.2 44	6.23 1.19 11.6-16.2 40	6.81 1.73 10.4-15 43

- Face velocity is measured in m/sec.
- Total pressure loss in mm of H_2O & Area factor in squre meter.
- Throw[meters]is measured for a terminal velocities of o.5 & 0.25 m/sec.
- NC baced on a room attenuation of 10 dB.

STANDARD SIZES & AIR FLOW DATA RATING WITH 0°& 45° DEFLECTION

CFM / M³/sec	Listed Size in mm x mm	600 x 400 900 x 250 800 x 300 1200 x 200		800 x 350 900 x 300 1100 x 250 1400 x 200		600 x 600 900 x 400 1000 x 350 1200 x 300		750 x 600 900 x 500 1000 x 450 1500 x 300 1200 x 375		800 x 750 900 x 700 1000 x 600 1200 x 500	
	Area factor Deflection	0.1352 0°	0.1 45°	0.162 0°	0.1159 45°	0.216 0°	0.162 45°	0.27 0°	0.216 45°	0.354 0°	0.288 45°
1100 0.519	Face vel Pt mm H_2O Throw in (M) N.C	3.84 0.64 9.8-14.3 30	5.19 0.98 9.2-13.2 33	3.20 0.59 9.2-13.6 28	4.48 0.84 8.6-12.8 29	2.4 0.52 8.8-13.0 25	3.2 0.76 8.1-11.3 27	1.92 0.42 7.0-9.1 20	2.4 0.62 6.2-8.3 24		
1200 0.567	Face vel Pt mm H_2O Throw in (M) N.C	4.19 0.87 10.3-14.8 32	5.67 1.09 9.8-14.0 35	3.5 0.69 9.7-14.3 30	4.89 0.92 9.1-13.2 32	2.63 0.56 9.3-13.8 27	3.5 0.81 8.4-11.9 29	2.1 0.48 7.5-10.8 24	2.63 0.71 6.8-9.4 26	1.6 0.38 6.3-9.2 20	1.97 0.51 5.7-8.1 22
1400 0.661	Face vel Pt mm H_2O Throw in (M) N.C	4.89 0.93 10.8-15.4 35	6.61 1.51 10.2-14.6 38	4.08 0.76 10.1-15.0 33	5.7 1.21 9.7-13.8 35	3.05 0.63 9.7-14.3 30	4.08 0.98 8.8-11.3 32	2.45 0.51 8.1-11.3 27	3.06 0.79 7.3-10.1 29	1.87 0.43 6.8-10.1 23	2.29 0.56 6.1-8.8 25
1600 0.756	Face vel Pt mm H_2O Throw in (M) N.C	5.59 1.03 11.5-16.9 38	7.56 1.82 10.8-15.1 40	4.67 0.84 10.6-15.4 36	6.52 1.43 10.1-14.5 37	3.5 0.71 10.1-14.8 33	4.82 1.12 9.3-12.1 34	2.8 0.63 8.8-12.1 29	3.5 0.91 7.9-10.7 31	2.13 0.51 7.3-10.9 25	2.63 0.64 6.7-9.2 28
1800 0.85	Face vel Pt mm H_2O Throw in (M) N.C	6.29 1.32 12.6-18.2 41	8.5 2.24 11.4-17.3 44	5.25 0.97 11.8-16.7 39	7.33 1.73 10.7-15.3 41	3.94 0.82 10.9-16.1 36	5.32 1.34 9.8-14.1 37	3.15 0.72 10.1-14.2 31	3.94 1.13 8.2-12.2 33	2.4 0.58 7.9-11.6 26	2.95 0.78 7.1-9.8 31
2000 0.945	Face vel Pt mm H_2O Throw in (M) N.C	6.99 1.61 13.8-19.7 44	9.78 2.53 12.4-18.6 47	5.83 1.03 13.2-18.1 41	8.15 1.92 11.6-16.5 43	4.38 0.88 12.1-17.3 39	5.83 1.52 10.3-14.8 41	3.5 0.78 10.7-15.1 33	4.38 1.23 8.8-13.1 36	2.7 0.61 8.2-11.8 28	3.28 0.83 7.4-10.4 32
2200 1.039	Face vel Pt mm H_2O Throw in (M) N.C			6.41 1.16 14.3-19.5 44	8.96 2.42 12.4-17.7 47	4.81 0.95 12.8-18.1 41	6.41 1.82 10.9-15.7 44	3.85 0.83 11.2-16.4 35	4.81 1.45 9.3-13.6 39	2.94 0.72 8.9-13.0 30	3.61 0.93 8.1-11.3 33
2400 1.134	Face vel Pt mm H_2O Throw in (M) N.C					5.25 1.13 13.7-19.2 43	7.0 2.04 11.4-16.4 46	4.2 0.93 12.2-17.3 37	5.25 1.63 9.9-14.7 42	3.2 0.81 9.5-13.8 32	3.94 1.03 8.7-12.1 35
2600 1.228	Face vel Pt mm H_2O Throw in (M) N.C					5.69 1.43 14.4-21.3 45	7.58 2.43 12.1-17.6 48	4.55 1.07 13.1-18.4 40	5.69 1.93 10.7-15.4 44	3.47 0.92 10.7-15.7 33	4.26 1.32 9.3-13.2 37

- Face velocity is measured in m/sec.
- Total pressure loss in mm of H_2O & Area factor in squre meter.
- Throw[meters]is measured for a terminal velocities of o.5 & 0.25 m/sec.
- NC baced on a room attenuation of 10 dB.

STANDARD SIZES & AIR FLOW FIXED HORIZONTAL BLADE AT 45° DEFLECTION

Listed size in mm x mm	Face vel m/sec.	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
	P_s mm H_2O	0.91	1.63	2.54	3.68	4.97	6.5	8.33	10.16
250x100 / 200x125 150x150	CFM	60	80	100	120	140	160	180	200
	M³/sec.	0.0283	0.0378	0.0472	0.0567	0.0661	0.0756	0.085	0.0945
	NC	<15	16	24	27	31	36	41	46
200x150 / 250x125 300x100	CFM	81	108	135	162	189	216	243	270
	M³/sec.	0.0383	0.051	0.0638	0.765	0.0893	0.102	0.1148	0.1275
	NC	<15	16	24	27	31	36	41	46
250x150 / 300x125 400x100	CFM	102	136	170	204	238	272	306	340
	M³/sec.	0.0482	0.0642	0.0803	0.0964	0.1124	0.1285	0.1445	0.1606
	NC	<15	15	24	27	31	36	41	46
300x150 / 350x125 450x100	CFM	120	160	200	240	280	320	360	400
	M³/sec.	0.0567	0.0756	0.0945	0.1134	0.1322	0.1512	0.17	0.1889
	NC	<15	15	25	28	31	36	41	47
250x200 / 350x150 400x125 / 500x100	CFM	141	188	235	282	329	376	423	470
	M³/sec.	0.0666	0.088	0.1109	0.1332	0.1554	0.178	0.199	0.222
	NC	<15	16	24	27	31	35	40	47
250x250 / 300x200 400x150 / 500x125 600x100	CFM	162	216	270	324	378	432	486	540
	M³/sec.	0.0765	0.102	0.1275	0.153	0.1785	0.204	0.2295	0.255
	NC	<15	16	24	27	31	35	42	47
300x250 / 450x150 500x150 / 600x125 750x100	CFM	180	270	300	360	420	480	540	600
	M³/sec.	0.085	0.1133	0.142	0.17	0.198	0.2267	0.255	0.2833
	NC	<15	17	23	27	31	35	40	46
300x300 / 350x250 450x200 / 600x150	CFM	240	320	400	480	560	640	720	800
	M³/sec.	0.1133	0.151	0.1889	0.2267	0.2645	0.302	0.3401	0.3778
	NC	<15	18	23	27	31	35	40	47
350x300 / 400x250 500x200 / 750x150	CFM	300	400	500	600	700	800	900	1000
	M³/sec.	0.1416	0.1889	0.236	0.283	0.331	0.3778	0.425	0.4723
	NC	<15	19	23	27	32	36	40	48
350x350 / 400x300 500x250 / 600x200 900x150	CFM	360	480	600	720	840	960	1080	1200
	M³/sec.	0.17	0.2267	0.283	0.34	0.3967	0.453	0.51	0.5667
	NC	<15	21	24	27	32	36	40	48
400x350 / 550x250 700x200	CFM	420	560	700	840	980	1120	1260	1400
	M³/sec.	0.198	0.264	0.331	0.397	0.463	0.529	0.595	0.661
	NC	<15	21	24	28	33	37	41	49
400x400 / 500x300 600x250 / 800x200	CFM	480	640	800	960	1120	1280	1440	1600
	M³/sec.	0.2267	0.3023	0.3778	0.453	0.529	0.6046	0.68	0.7556
	NC	16	22	25	29	33	38	42	49
500x350/600x300 700x250/900x200 1000x150	CFM	540	720	900	1080	1260	1440	1620	1800
	M³/sec.	0.255	0.3401	0.4251	0.51	0.51	0.6801	0.765	0.85
	NC	17	22	25	29	34	42	43	50
450x450 / 500x400 750x250 1000x200	CFM	600	800	1000	1200	1400	1600	1800	2000
	M³/sec.	0.2834	0.3778	0.4723	0.5669	0.6612	0.7556	0.85	0.9446
	NC	18	23	26	30	35	43	41	50
500x600 / 550x450 750x300 / 900x250 1000x200	CFM	660	880	1100	1320	1540	1760	1980	2200
	M³/sec.	0.3117	0.4156	0.5195	0.6234	0.7273	0.8313	0.935	1.039
	NC	18	23	27	31	36	40	44	52

- Face velocity is measured in m/sec.
- P_s: Static pressure loss in mm of H_2O
- NC based on room attenuation of 10 dB

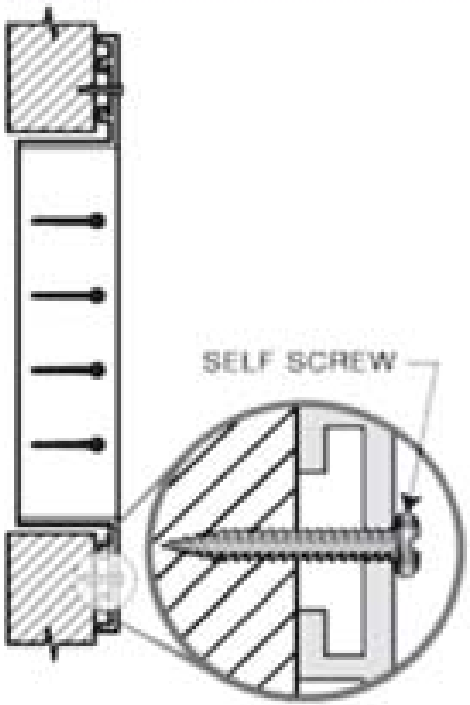
STANDARD SIZES & AIR FLOW DATA RATING WITH 0° DEFLECTION

Listed size in	Face vel m/sec.	2.5	3.0	3.5	4.0	4.5	5.00	5.50	6.00
mm x mm	P_s mm H_2O	1.7	2.46	3.35	4.37	5.59	6.86	8.38	9.9
250x100 / 200x125 150x150	CFM	150	180	210	240	270	300	330	360
	M³/sec.	0.071	0.085	0.099	0.113	0.127	0.142	0.156	0.17
	NC	<15	19	22	25	29	33	36	38
200x150 / 250x125 300x100	CFM	180	210	240	280	320	360	390	420
	M³/sec.	0.085	0.099	0.113	0.132	0.151	0.165	0.184	0.198
	NC	<15	16	22	26	29	33	35	37
250x150 / 300x125 400x100	CFM	220	260	310	350	400	440	490	530
	M³/sec.	0.104	0.123	0.146	0.165	0.189	0.208	0.231	0.250
	NC	16	20	25	28	31	35	39	40
300x150 / 350x125 450x100	CFM	240	290	340	390	440	490	540	590
	M³/sec.	0.113	0.137	0.161	0.184	0.208	0.231	0.255	0.279
	NC	15	20	24	27	30	34	37	40
250x200 / 350x150 400x125 / 500x100	CFM	270	320	370	420	480	530	590	640
	M³/sec.	0.127	0.151	0.165	0.198	0.227	0.25	0.279	0.302
	NC	<15	17	21	24	28	31	35	38
250x250 / 300x200 400x150 / 500x125 600x100	CFM	310	370	430	490	550	610	680	740
	M³/sec.	0.146	0.165	0.203	0.231	0.259	0.288	0.321	0.349
	NC	15	19	23	26	30	34	36	39
300x250 / 450x150 500x150 / 600x125 750x100	CFM	360	440	510	580	660	730	810	800
	M³/sec.	0.17	0.208	0.241	0.274	0.312	0.345	0.382	0.416
	NC	15	20	24	27	31	34	37	39
300x300 / 350x250 450x200 / 600x150	CFM	420	500	590	670	750	840	930	1020
	M³/sec.	0.198	0.236	0.279	0.316	0.354	0.397	0.439	0.482
	NC	<15	15	23	27	30	34	37	40
350x300 / 400x250 500x200 / 750x150	CFM	450	540	630	720	810	900	1000	1090
	M³/sec.	0.213	0.255	0.297	0.34	0.382	0.425	0.472	0.514
	NC	<15	16	21	25	29	33	37	40
350x350 / 400x300 500x250 / 600x200 900x150	CFM	510	620	720	820	930	1030	1140	1240
	M³/sec.	0.241	0.293	0.340	0.387	0.439	0.486	0.538	0.586
	NC	15	20	24	29	32	37	40	43
400x400 / 500x300 600x250 / 800x200	CFM	580	700	820	940	1050	1170	1290	1400
	M³/sec.	0.274	0.331	0.387	0.444	0.496	0.553	0.609	0.661
	NC	15	20	25	30	34	38	41	44
500x350/600x300 700x250/900x200 1000x150	CFM	660	800	930	1060	1200	1330	1470	1600
	M³/sec.	0.312	0.378	0.439	0.501	0.567	0.628	0.694	0.756
	NC	16	22	26	32	35	39	42	45
450x450 / 500x400 750x250 1000x200	CFM	700	840	980	1120	1270	1400	1550	1690
	M³/sec.	0.331	0.397	0.463	0.529	0.599	0.661	0.732	0.798
	NC	16	21	25	30	33	36	39	43
500x500 / 550x450 750x300 / 900x250 1000x200	CFM	800	970	1130	1290	1440	1600	1770	1930
	M³/sec.	0.378	0.458	0.533	0.605	0.68	0.756	0.836	0.912
	NC	18	23	27	33	38	40	43	45

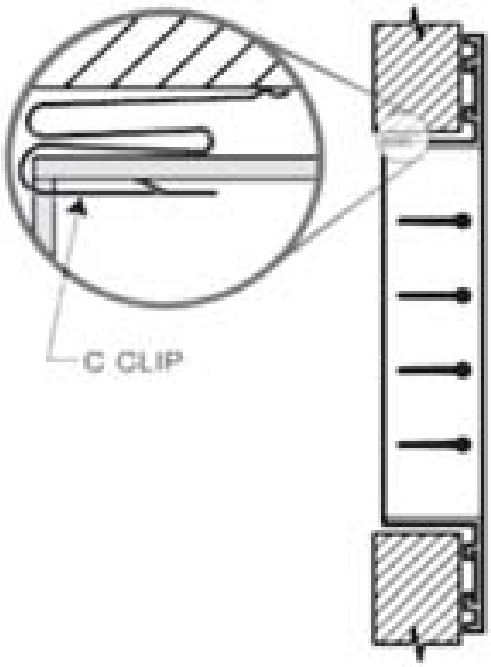
- Face velocity is measured in m/sec.
- P_s: Static pressure loss in mm of H_2O
- NC based on room attenuation of 10 dB

FIXING DETAILS & HOW TO ORDER

Screw Fixing



Concealed Fixing



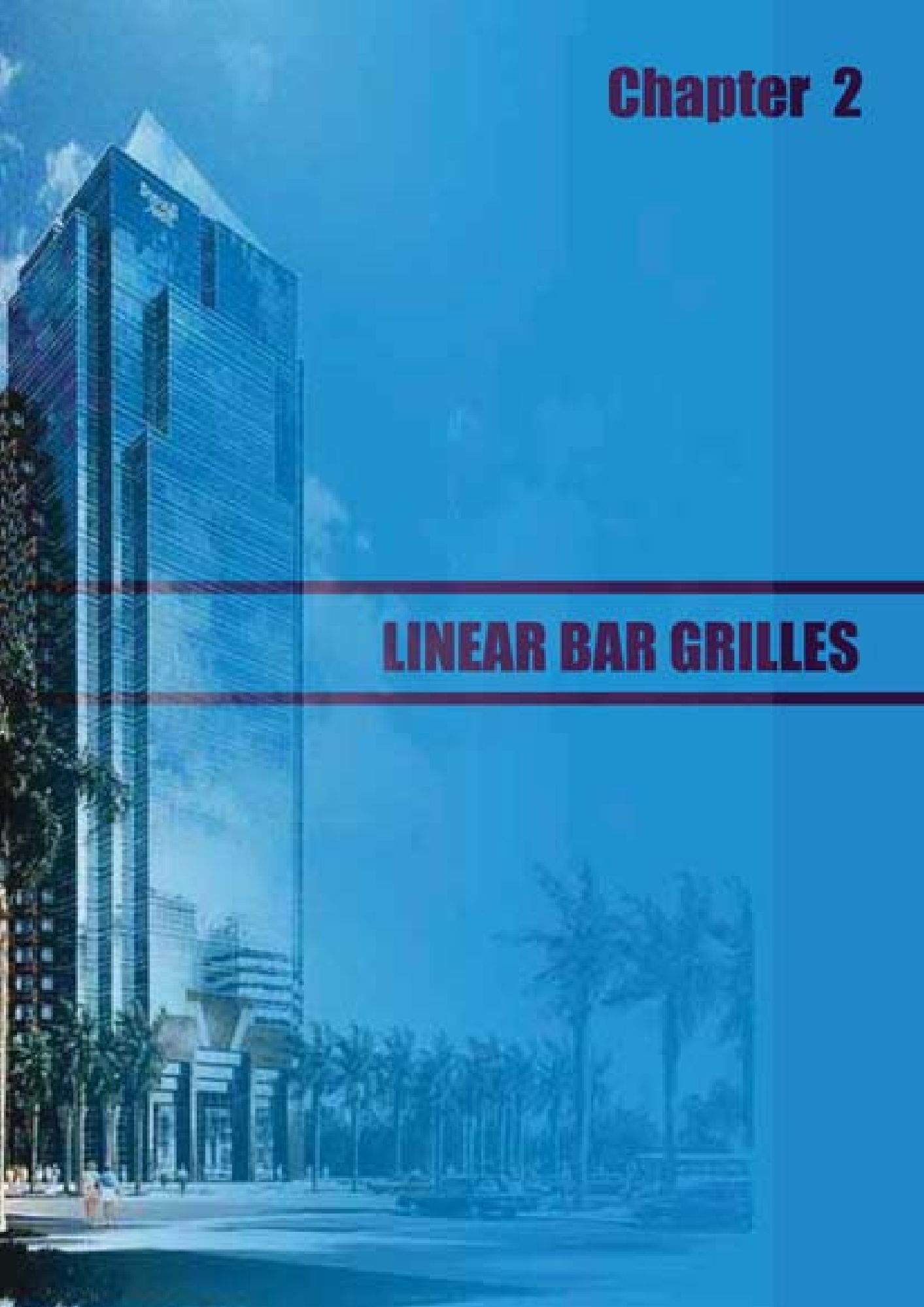
How to Order:

Model	Aerofoil Blade	Size	Front Blade Option	Fixing Method	Finish	Quantity
SH-WG RV-WG	H= Front Horizontal V=Front Vertical	Neck Size (In mm)	Fixed Adjustable	Concealed fixing(CF) Screw Fixing (SC)	A=RAL 9010 B=RAL 9016 C=RAL Other Color	Numbers

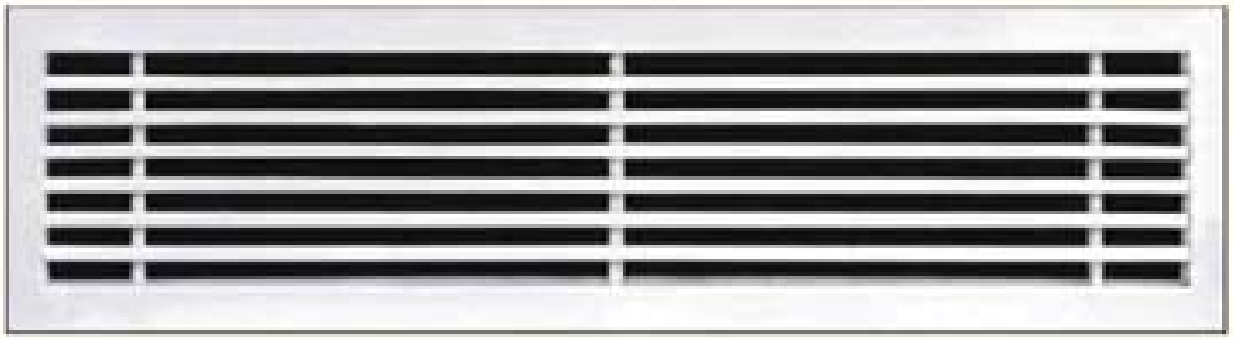
Order Example:
To select supply air grille, front horizontal aerofoil blades of size 500 X 250 mm, Qty =50 Nos, with RAL – 9010 color finish
Ex: SH-WG -600 X 200 – 60 Nos

Chapter 2

LINEAR BAR GRILLES



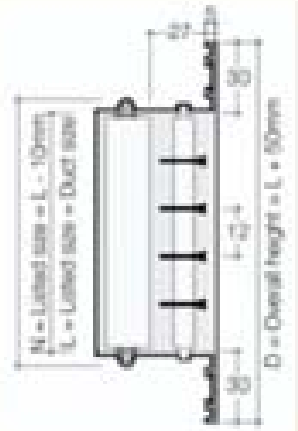
Linear Bar Grilles



General:
The winner central air conditioning linear bar designed for various throw level and variety of standard and fixed deflections of air flow. Linear bar grilles are mainly used in the side walls of the air-conditioning buildings to ensure the uniform air flow with minimized noise level. Linear bar registers supplied with opposed blade dampers with adjustable rear aerofoil blades.

Supply air Linear Bar Grilles

Model: SLG-WG



Description:

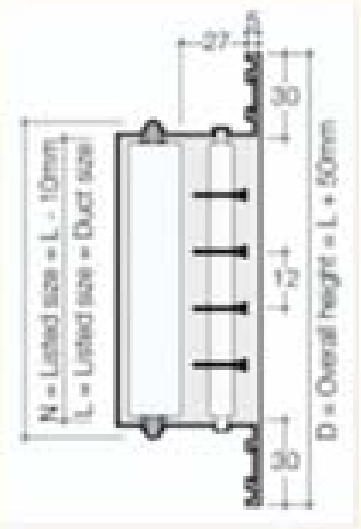
- Frame and face bars are of high quality extruded aluminum profiled constriction with the a dvantages of corroding resistance and rigidity.
- Horizontal face bar with 0°, 15°- 1 way throw and 15°-2 way throw are fixed rigidity to the frame with 8 mm pipes.
- Vertical aluminum aerofoil blades are fixed at the rear side of the frame by nylon bushes. These blades can be adjusted manually and individually in the vertical panel to obtain optimum air distribution.
- Total structure is manufactured by mechanical assembly, assuring rigidity and to maintain straight- line appearance.
- Supplied with C – clamps for concealed fixing.

Construction:

- Extruded aluminum profile frame with 30 mm flange width and 45 mm height
- 4mm, 5mm&6mm face width and 18mm height aluminum extruded blades.
- Extruded aluminum profile with 18mm height and aerofoil shaped.
- 0°, 15° single way & double way & 35° single way deflection front blades.
- 50mm to 300mm width (or height) with 50mm increments as standard.
- Any length from 200 to 6 Mt

Return air Linear Bar Grilles

Model: RLG-WG



Description:

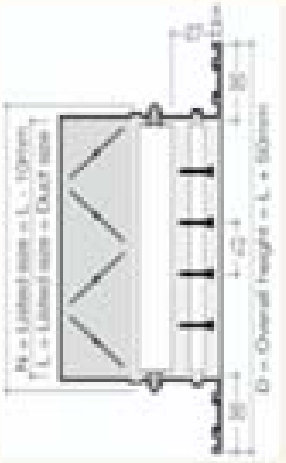
- Frame and face bars are of high quality extruded aluminum profiled constriction with the advantages of corroding resistance and rigidity.
- Horizontal face bar with 0°, 15°- 1 way throw and 15°-2 ways throw are fixed rigidity to the frame with 8 mm pipes.
- Vertical aluminum aerofoil blades are fixed at the rear side of the frame by nylon bushes. These blades can be adjusted manually and individually in the vertical panel to obtain optimum air distribution.
- Total structure is manufactured by mechanical assembly, assuring rigidity and to maintain straight- line appearance.
- Supplied with C – clamps for concealed fixing.

Construction:

- Extruded aluminum profile frame with 30 mm flange width and 45 mm height
- 4mm, 5mm&6mm face width and 18mm height aluminum extruded blades.
- Extruded aluminum profile with 18mm height and aerofoil shaped.
- 0°, 15° single way & double way & 35° single way deflection front blades.
- 50mm to 300mm width (or height) with 50mm increments as standard.
- Any length from 200 to 6 Mt.
- Bar spacing 12mm as standard 6mm as optional.

Supply air Linear Bar Grilles

Model: SLGD-WG



Description:

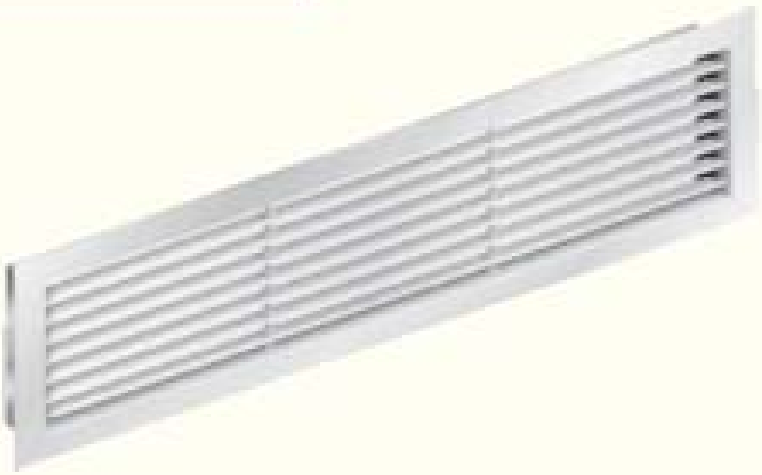
- Frame and face bars are of high quality extruded aluminum profiled constriction with the advantages of corroding resistance and rigidity.
- Horizontal face bar with 0°, 15°- 1 way throw and 15°-2 ways throw are fixed rigidity to the frame with 8 mm pipes.
- Vertical aluminum aerofoil blades are fixed at the rear side of the frame by nylon bushes. These blades can be adjusted manually and individually in the vertical panel to obtain optimum air distribution.
- Total structure is manufactured by mechanical assembly, assuring rigidity and to maintain straight- line appearance.
- Supplied with C – clamps for concealed fixing.

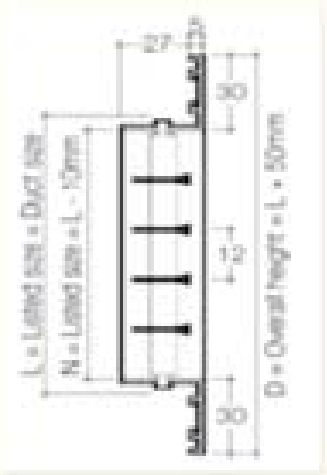
Construction:

- Extruded aluminum profile frame with 30 mm flange width and 45 mm height
- 4mm, 5mm&6mm face width and 18mm height aluminum extruded blades.
- Extruded aluminum profile with 18mm height and aerofoil shaped.
- 0°, 15° single way & double way & 35° single way deflection front blades.
- 50mm to 300mm width (or height) with 50mm increments as standard.
- Any length from 200 to 6 Mt.
- Bar spacing 12mm as standard 6mm as optional.

Return air Linear Bar Grilles

Model: RLR-WG





Description:

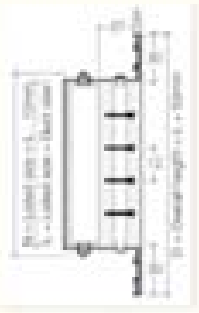
- Frame and face bars are of high quality extruded aluminum profiled constriction with the advantages of corroding resistance and rigidity.
- Horizontal face bar with 0°, 15°- 1 way throw and 15°-2 ways throw are fixed rigidity to the frame with 8 mm pipes.
- Vertical aluminum aerofoil blades are fixed at the rear side of the frame by nylon bushes. These blades can be adjusted manually and individually in the vertical panel to obtain optimum air distribution.
- Total structure is manufactured by mechanical assembly, assuring rigidity and to maintain straight- line appearance.
- Supplied with C – clamps for concealed fixing.

Construction:

- Extruded aluminum profile frame with 30 mm flange width and 45 mm height
- 4mm, 5mm&6mm face width and 18mm height aluminum extruded blades.
- Extruded aluminum profile with 18mm height and aerofoil shaped.
- 0°, 15° single way & double way & 35° single way deflection front blades.
- 50mm to 300mm width (or height) with 50mm increments as standard.
- Any length from 200 to 6 Mt.
- Bar spacing 12mm as standard 6mm as optional.

Curved Linear Bar Grilles

Model: CLR-WG



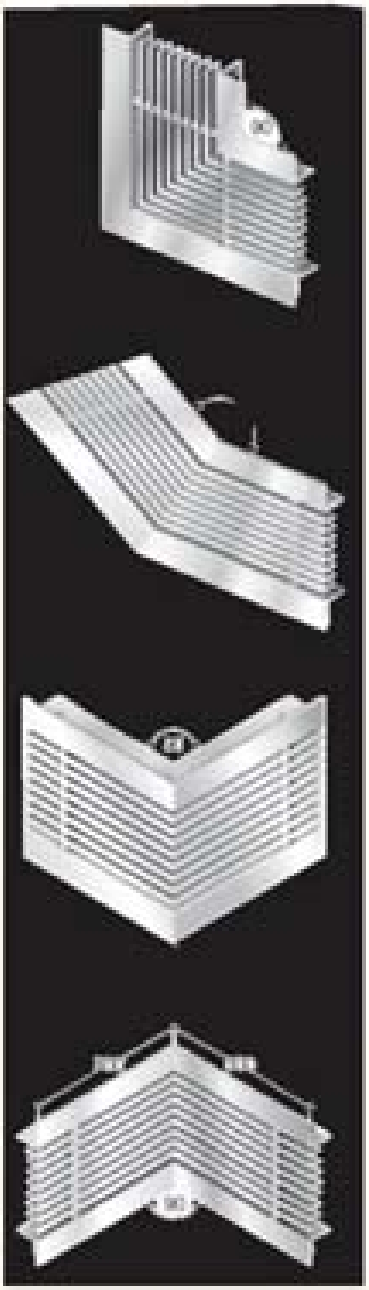
Description:

- Frame and face bars are of high quality extruded aluminum profiled constriction with the advantages of corroding resistance and rigidity.
- Supply and return air curved liner bar grill are available up to a length of 3 mts a minimum radius of curvature of 1 meter.
- For perfect unbroken appearance of continuous runs, alignment strip are provide with no additional cost
- Horizontal face bar with 0°, 15°- 1 way throw and 15°-2 ways throw are fixed rigidity to the frame with 8 mm pipes.
- Vertical aluminum aerofoil blades are fixed at the rear side of the frame by nylon bushes. These blades can be adjusted manually and individually in the vertical panel to obtain optimum air distribution.
- Total structure is manufactured by mechanical assembly, assuring rigidity and to maintain straight- line appearance.
- Supplied with C – clamps for concealed fixing.

Construction:

- Extruded aluminum profile frame with 30 mm flange width and 45 mm height
- 4mm, 5mm&6mm face width and 18mm height aluminum extruded blades.
- Extruded aluminum profile with 18mm height and aerofoil shaped.
- 0°, 15° single way & double way & 35° single way deflection front blades.
- 50mm to 300mm width (or height) with 50mm increments as standard.
- Any length from 200 to 6 Mt.
- Bar spacing 12mm as standard 6mm as optional.

Optional Mitered Corners



Standard 90° horizontal mitered corner available for floor, sill and ceiling application in 0°, 15° one way throw and 15° two way throw without damper.

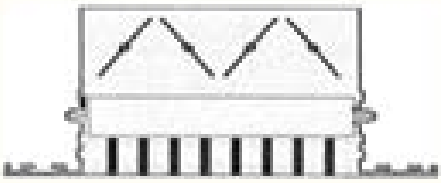
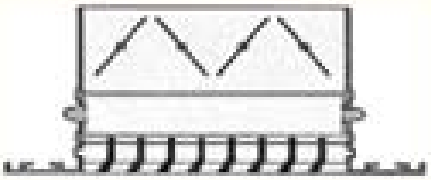
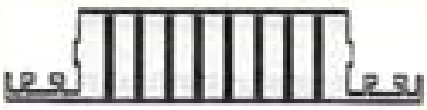
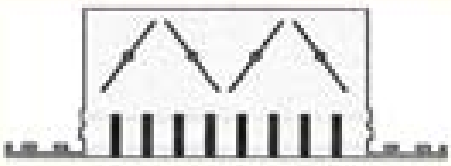
Special horizontal mitered corner selection available for floor, sill and ceiling application includes an angle greater than 90° and less than 180° available in 0°, 15° one way throw and two way throw without damper.

Vertical outside mitered corners are available for wall application at the junction of two outside wall with a standard angle of 90°.Available in 0°, 15° one way throw and 15° tow way throw without damper

Vertical inside mitered corners are available for wall application at the junction of two inside walls with a standard angle of 90°. Available in 0°, 15° one way throw and 15° tow way throw without damper

Bar Deflections

Standard

Model	0° one way	15° one way
SLG-WG		
SLR-WG		
RLG-WG		
RLR-WG		

Optional

a) - 15° one way	b) - 15° two way	c) - 15° two way
		

Performance Data
0° Deflection/12mm blade spacing/Supply linear bar grilles

Width (mm) Ak in m²	Face Velocity	2.0	2.5	3.0	3.5	4.0	4.5	5.0
50	M/Sec.	0.08	0.1	0.12	0.14	0.16	0.19	0.2
	CFM	169	213	255	297	339	381	423
	PS in mm H_2O	0.14	0.20	0.20	0.23	0.29	0.37	0.45
0.039	Throw (Mt.)	2.7-4.1-5.6	3.5-4.4-6.2	4.1-5.1-7.1	4.5-5.5-7.9	4.9-5.8-8.2	5.4-6.4-9.4	5.4-6.8-9.7
	NC	<15	<15	<15	17	22	25	31
100	M/Sec.	275	346	413	483	550	620	689
	CFM	0.13	0.164	0.196	0.228	0.26	0.293	0.326
	PS in mm H_2O	0.15	0.20	0.20	0.28	0.36	0.46	0.56
0.059	Throw (Mt.)	3.5-4.6-7.1	4.1-5.3-7.8	4.8-5.9-8.5	5.3-6.3-9.2	5.8-7.2-10.1	6.4-8.1-11.4	6.9-8.6-12.5
	NC	<15	<15	15	18	23	27	32
150	M/Sec.	373	466	559	653	745	838	932
	CFM	0.177	0.22	0.264	0.309	0.352	0.397	0.44
	PS in mm H_2O	0.15	0.19	0.23	0.33	0.42	0.54	0.65
0.078	Throw (Mt.)	4.2-5.7-8.3	4.7-6.2-9.1	5.5-7-10.2	6.2-7.7-10.9	6.9-8.7-11.6	7.4-9.3-13.1	7.8-9.8-14.0
	NC	<15	<15	16	18	24	29	34
200	M/Sec.	470	589	706	824	940	1059	1175
	CFM	0.222	0.278	0.334	0.389	0.443	0.499	0.556
	PS in mm H_2O	0.16	0.20	0.29	0.36	0.49	0.6	0.84
0.097	Throw (Mt.)	4.6-6.2-9.0	5.3-6.9-10.1	6.4-7.8-11.3	7.1-8.5-12.3	7.9-9.5-13.1	8.4.10.4-14.5	9.0-11.0-15.9
	NC	<15	16	17	21	26	32	36
250	M/Sec.	567	709	851	994	1135	1277	1420
	CFM	0.269	0.336	0.403	0.470	0.536	0.604	0.68
	PS in mm H_2O	0.19	0.29	0.32	0.40	0.53	0.71	0.87
0.116	Throw (Mt.)	5.1-6.8-10	5.6-7.8-11	6.7-8.5-12.1	7.6-8.4-13.4	8.6-10.3-14.4	9.0-11,-15.9	9.5-11.9-17.5
	NC	<15	16	21	27	31	35	40
300	M/Sec.	686	857	1029	1200	1372	1543	1715
	CFM	0.324	0.405	0.487	0.567	0.648	0.729	0.81
	PS in mm H_2O	0.19	0.28	0.33	0.44	0.59	0.76	0.94
0.136	Throw (Mt.)	5.3-7.5-10.8	6.3-8.4-11.8	7.2-9.4-13.0	8.4-10.5-14.4	9.3-11.3-15.4	9.8-12.2-17.0	10.3-13-18.6
	NC	<15	16	25	30	33	37	42

- Data based on one meter unit length of the grille with damper in full open position.
- Face velocity is measured in m/sec.
- Static pressure (Ps) loss is in mm of H_2O
- Throw (meters) is measured for terminal velocities of 0.75, 0.5 & 0.25 m/sec.
- NC based on a room attenuation of 10 dB

Performance Data
0° Deflection/12mm blade spacing/Returns linear bar grilles

Width (mm) Ak in m²							
50	M3/Sec.	0.157	0.197	0.236	0.276	0.315	0.354
	CFM	332	418	501	586	667	751
	PS in mm H_2O	0.43	0.70	1.00	1.38	1.83	2.24
	NC	<15	18	25	31	33	38
100	M3/Sec.	0.197	0.236	0.276	0.315	0.354	0.393
	CFM	418	501	586	667	751	833
	PS in mm H_2O	0.46	0.67	0.89	1.15	1.49	1.78
	NC	<15	18	24	31	34	36
150	M3/Sec.	0.236	0.276	0.315	0.354	0.393	0.472
	CFM	501	586	667	751	833	1000
	PS in mm H_2O	0.46	0.65	0.81	1.04	1.27	1.83
	NC	15	17	26	29	30	36
200	M3/Sec.	0.276	0.315	0.354	0.393	0.472	0.551
	CFM	586	667	751	833	1000	1168
	PS in mm H_2O	0.43	0.64	0.87	0.91	1.4	1.9
	NC	17	22	25	27	33	38
250	M3/Sec.	0.315	0.354	0.393	0.472	0.551	0.629
	CFM	667	751	833	1000	1168	1332
	PS in mm H_2O	0.43	0.57	0.66	0.94	1.28	1.67
	NC	19	22	23	28	33	36
300	M3/Sec.	0.354	0.393	0.472	0.551	0.629	0.708
	CFM	751	833	1000	1168	1330	1500
	PS in mm H_2O	0.46	0.56	0.69	0.99	1.32	1.7
	NC	20	22	24	29	36	40

- Data based on one meter unit length of the grille.
- Ps – Static pressure loss is in mm of H_2O
- NC based on a room atteunation of 10 dB

Performance Data
15° Deflection/12mm blade spacing/Supply linear bar grilles

Width (mm) Ak in m²	Face Velocity	2.0	2.5	3.0	3.5	4.0	4.5	5.0
50	M/Sec.	0.08	0.1	0.12	0.15	0.17	0.19	0.2
	CFM	170	213	255	297	339	381	423
	PS in mm H_2O	0.15	0.20	0.21	0.26	0.32	0.40	0.5
0.040	Throw (Mt.)	2.7-4.1-5.5	3.5-4.4-6.1	4.1-5.0-7.1	4.5-5.5-7.7	4.8-5.8-8.2	5.1-6.3-8.9	5.2-6.4-9.3
	NC	<15	<15	<15	17	22	25	31
100	M/Sec.	0.14	0.164	0.196	0.228	0.26	0.293	0.326
	CFM	276	346	413	483	550	620	689
	PS in mm H_2O	0.15	0.20	0.22	0.3	0.39	0.5	0.6
0.066	Throw (Mt.)	3.5-4.8-7.1	4.1-5.3-7.8	4.7-5.9-8.4	5.3-6.2-8.0	5.8-7.1-8.7	6.1-7.7-10.8	6.4-8.3-11.7
	NC	<15	<15	15	18	23	27	32
150	M/Sec.	0.177	0.22	0.263	0.309	0.353	0.397	0.44
	CFM	373	466	558	653	746	836	932
	PS in mm H_2O	0.15	0.19	0.26	0.37	0.46	0.58	0.7
0.088	Throw (Mt.)	4.2-5.7-8.3	4.7-6.2-9.1	5.4-6.8-10	6.0-7.6-10.6	6.7-8.5-11.5	7.1-8.9-12.5	7.4-9-313.2
	NC	<15	<15	16	19	24	29	34
200	M/Sec.	0.223	0.278	0.334	0.390	0.443	0.499	0.556
	CFM	471	589	706	825	940	1059	1175
	PS in mm H_2O	0.19	0.21	0.33	0.38	0.52	0.66	0.10
0.111	Throw (Mt.)	4.7-6.3-8.1	5.3-6.9-10.0	6.1-7.8-11.3	6.9-8.3-11.9	7.7-9.2-12.8	8.9.9-13.8	8.5-10.4-14.9
	NC	<15	16	17	22	26	32	36
250	M/Sec.	0.269	0.336	0.403	0.470	0.537	0.604	0.68
	CFM	568	710	851	994	1135	1277	1420
	PS in mm H_2O	0.2	0.26	0.34	0.43	0.57	0.78	0.94
0.134	Throw (Mt.)	5.1-6.8-11	5.6-7.8-11	6.6-8.3-11.8	7.6-9.3-12.8	8.4-10-14	8.5-10.5-15.1	9.1-12.3-15.4
	NC	<15	16	21	27	31	35	40
300	M/Sec.	0.324	0.405	0.487	0.567	0.648	0.729	0.81
	CFM	686	857	1029	1200	1372	1543	1715
	PS in mm H_2O	0.2	0.3	0.36	0.48	0.64	0.84	1.01
0.162	Throw (Mt.)	5.3-7.5-10.8	6.2-8.4-11.8	7.2-9.4-12	8.2-10.2-13.8	8.9-10.9-15	9.2-11.8-15.2	9.6-12.317.6
	NC	<15	18	25	29	33	37	42

- The above data based on one meter long linear grille with damper in full open position.
- Face velocity is measured in m/sec.
- Static pressure (Ps) loss is in mm of H_2O
- Throw (meters) is measured for terminal velocities of 0.75, 0.5 & 0.25 m/sec.
- NC based on a room attenuation of 10 dB

Performance Data
15° Deflection-one Way12mm blade spacing/Returns linear bar grilles

Width (mm) Ak in m²	Volume / Velocity / Pressure Drop & Noise Level						
50	CFM	332	418	501	586	667	751
	M/Sec.	0.157	0.197	0.236	0.276	0.315	0.354
	-PS in mm H_2O	0.46	0.73	1.04	1.43	1.89	2.33
	NC	<15	<18	26	31	32	41
100	CFM	418	501	586	667	751	833
	M/Sec.	0.197	0.236	0.276	0.315	0.354	0.393
	-PS in mm H_2O	0.49	0.69	0.94	1.20	1.56	1.88
	NC	<15	20	25	31	35	38
150	CFM	501	586	667	751	833	1000
	M/Sec.	0.236	0.276	0.315	0.354	0.393	0.472
	-PS in mm H_2O	0.49	0.67	0.86	1.11	1.34	1.92
	NC	16	20	27	32	32	37
200	CFM	586	667	751	833	1000	1168
	M/Sec.	0.276	0.315	0.354	0.393	0.472	0.551
	-PS in mm H_2O	0.46	0.64	0.79	0.99	1.37	1.86
	NC	17	23	26	30	34	39
250	CFM	667	751	833	1000	1168	1332
	M/Sec.	0.315	0.354	0.393	0.472	0.551	0.629
	-PS in mm H2O	0.45	0.59	0.71	1.02	1.37	1.79
	NC	19	23	24	30	34	38
300	CFM	751	833	1000	1168	1333	1500
	M/Sec.	0.354	0.393	0.472	0.551	0.629	0.708
	-PS in mm H_2O	0.49	0.6	0.74	1.06	1.45	1.8
	NC	20	23	25	30	37	42

- The above data is derived based on one meter long linear grille with damper in full open position.
- Static pressure (Ps) loss is in mm of H_2O
- NC based on a room attenuation of 10 dB

Performance Data

15° Deflection-2 Way 12mm blade spacing/Supply linear bar grilles

Width (mm) Ak in m²	Face Velocity (M/Sec.)	2.0	2.5	3.0	3.5	4.0	4.5	5.0
50	M³/Sec.	0.078	0.098	0.117	0.137	0.156	0.176	0.195
	CFM	165	207	248	290	330	373	413
	PS in mm H_2O	0.15	0.21	0.21	0.25	0.32	0.4	0.51
0.039	Throw (Mt.)	2.7-4.0-5.5	3.4-4.3-6.0	4.0-4.9-6.7	4.3-5.2-7.7	4.6-5.5-7.6	4.9-5.8-8.2	4.9-6.0-8.5
	NC	<15	<15	<15	16	22	25	30
100	M³/Sec.	0.118	0.149	0.178	0.208	0.236	0.267	0.295
	CFM	250	314	376	439	500	564	626
	PS in mm H_2O	0.15	0.22	0.22	0.3	0.40	0.52	0.61
0.059	Throw (Mt.)	3.4-4.6-7.0	4.0-5.2-7.5	4.7-5.6-8.8	5.3-6.0-8.5	5.5-6.8-9.1	5.7-7.3-10	6.7-8.10.7
	NC	<15	<15	<15	17	22	27	31
150	M³/Sec.	0.157	0.196	0.235	0.273	0.312	0.351	0.40
	CFM	331	414	496	579	661	744	826
	PS in mm H_2O	0.15	0.22	0.26	0.37	0.47	0.59	0.72
0.078	Throw (Mt.)	4.0-5.5-8.0	4.8-6.0-8.7	5.2-6.8-9.5	5.8-7.3-11	6.4-8-10.7	6.7-8.5-11.5	7.8-9-12.2
	NC	<15	<15	<15	17	24	28	33
200	M³/Sec.	0.195	0.244	0.292	0.338	0.389	0.438	0.486
	CFM	411	516	617	719	822	926	1028
	PS in mm H_2O	0.24	0.15	0.32	0.39	0.54	0.67	0.82
0.097	Throw (Mt.)	5.3-6.8-9.8	2.7-4.0-5.5	6.1-7.6-10.7	6.6-8.0-11.4	7.4-8.8-11.9	7.7-9.5-12.9	8.1-9.9-13.7
	NC	<15	<15	16	22	27	32	36
250	M³/Sec.	0.233	0.30	0.349	0.406	0.465	0.523	0.59
	CFM	492	615	734	861	983	1106	1129
	PS in mm H_2O	0.3	0.26	0.34	0.43	0.59	0.77	0.95
0.116	Throw (Mt.)	4.9-6.8-9.8	5.8-7.6-10.7	6.4-8.2-11.4	7.4-8.8-12.3	8.1-9.6-13.2	8.3-10-14	8.5-10.7-15
	NC	<15	<15	20	25	31	35	37
300	M³/Sec.	0.273	0.35	0.409	0.477	0.545	0.613	0.68
	CFM	577	721	865	1009	1153	1296	1440
	PS in mm H_2O	0.3	0.32	0.37	0.48	0.65	0.86	1.03
0.136	Throw (Mt.)	5.3-7.4-10.8	6.1-8.2-12.6	7.8-1.12.3	7.9-9.9-13.1	8.6-10.4-15	8.9-11-15	9.1-11.6-16.2
	NC	<15	18	25	29	33	35	40

- The above data is derived based on one meter long linear grille with damper in full open position.
- Face velocity is measured in m/sec.
- Static pressure (Ps) loss is in mm of H_2O
- Throw (meters) is measured for terminal velocities of 0.75, 0.5 & 0.25 m/sec.
- NC based on a room attenuation of 10 dB

Performance Data
15° Deflection-2 Way 12mm blade spacing/Return linear bar grilles

Width (mm) Ak in m²	Volume / Velocity / Pressure Drop & Noise Level						
50	CFM M/Sec. -PS in mm H_2O NC	332 0.157 0.48 <15	418 0.197 0.75 18	501 0.236 1.08 26	586 0.276 1.47 32	667 0.315 1.91 36	751 0.354 2.42 42
100	CFM M/Sec. -PS in mm H_2O NC	418 0.197 0.52 15	501 0.236 0.72 20	586 0.276 0.97 27	667 0.315 1.27 32	751 0.354 17 35	833 0.393 1.98 40
150	CFM M/Sec. -PS in mm H_2O NC	501 0.236 0.52 17	585 0.276 0.69 22	667 0.315 0.89 28	751 0.354 1.15 32	833 0.393 1.40 34	1000 0.472 2.01 38
200	CFM M/Sec. -PS in mm H_2O NC	586 0.276 0.49 16	667 0.315 0.64 23	751 0.354 0.82 26	833 0.393 0.99 32	1000 0.472 1.42 35	1168 0.551 1.92 40
250	CFM M/Sec. -PS in mm H_2O NC	667 0.315 0.48 19	751 0.354 0.62 23	833 0.393 0.74 25	1000 0.472 1.07 31	1168 0.551 1.46 35	1332 0.629 1.9 40
300	CFM M/Sec. -PS in mm H_2O NC	751 0.354 0.6 20	833 0.393 0.64 25	1000 0.472 0.77 27	1168 0.551 1.14 31	1333 0.629 1.52 38	1500 0.708 2.0 44

- The above data is derived based on one meter long linear bar grille without damper.
- Static pressure (Ps) loss is in mm of H_2O
- NC based on a room attenuation of 10 dB

Chapter 3

EGG CRATE GRILLE

EGG CRATE GRILLE

General:

The winner central air conditioning egg crate grilles are designed for return and exhaust application in air conditioned room. Since it has unique type of mesh formed by ½" X ½" squares, gives egg crate appearance. The same kinds of grill are used in elevators cabins also. As the egg crate louver is made by aluminum, we can have desired powder coated color which gives further rigidity to the construction.

Products Catalogue